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ABSTRACT

The Competency Based Learning (CBL) Project at Case Western Reserve University is both an inquiry into the nature of professional competence and competence development in the Applied Behavioral Sciences and a pilot innovation and evaluation project in the Ph.D. and Master's programs of the Department of Organizational Behavior. The initial task involved an investigation into the nature of and criteria for competence in four areas of professional work: organizational development and change; group leadership, training, and development; inquiry, research and knowledge generation; and professional values and ethics. Premises that have implications for the design of educational experiences are that competence always has a context, is rooted in a knowledge base and analytic skills, is interdependent with values, and involves the whole person. The Ph.D. program in organizational behavior is described in terms of its framework, learning strategies, and problems involving innovations. A description is provided of the design, implementation, and evaluation of the new competency-based Master of Science in Organizational Development program. Other topics addressed are contributions to theory and strategy in competency-oriented education, dissemination of strategies to other programs and associations, improving the certification processes and criteria in credentialing organizations, and an overview about development of competency based education. (SW)

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TOWARD COMPETENCY BASED LEARNING IN ORGANIZATIONAL BEHAVIOR

Final Report
October, 1976

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I. INTRODUCTION

The Competency Based Learning (CBL) Project at Case Western Reserve University is both an inquiry into the nature of professional competence and competence development in the Applied Behavioral Sciences and a pilot innovation and evaluation project in the Ph.D. and Master's programs of the Department of Organizational Behavior. The scope of our project activities has been exceptionally broad and our methods of approach both varied and eclectic. Outcomes of our efforts are similarly diverse--richly rewarding in many ways, promising on the whole, and in some areas the consequences are still in doubt. Several impressive program innovations have emerged which merit attention and distribution within the professional field and in higher education in general. We are continuing to develop and refine these innovations within our programs at CWRU, and, in addition, several action steps have been taken and will be continued, in disseminating them more broadly.

The project has produced some significant contributions to knowledge about educational structures and processes in relation to career development. Along the way we have also bumped into difficult problems and have fallen into some traps from which we have gained new insights into the difficulties of educational innovation. Our learnings from the process have been both exciting and sobering, confusing in some regards and occasionally disturbing, but for the most part encouraging. One hopes that others can learn from our experience as well as from the products of our work.

The purpose of this report is to describe what we have done within the scope of the project, to identify innovations and changes in doctoral and professional programs deriving from project activities, to provide a preliminary evaluation of the consequences of our innovative efforts in these programs, and to share some of the things we have learned about the nature of professional competence and about the process of educating for competence.

Project efforts, while diverse in strategy and arena, have all been directed toward one or more of the following broad purposes:

1. To investigate and conceptualize the nature of competence in practice in focu areas of the Applied Behavioral Sciences.
2. To experiment with various approaches to learning and assessment in relation to the development of competence.
3. To integrate the more promising approaches in innovative programs at the professional master's and Ph.D. levels of education and beyond.
4. To disseminate our planning, program development, and learning strategies to other educational institutions, professional development programs, and professional accrediting associations.

Summary of Major Project Activities

The project was initially conceived as a three year R&D effort addressing program innovations aimed toward educating for competence in four areas of professional work:

1. Organizational development and change;
2. Group leadership, training, and development;
3. Inquiry, research and knowledge generation; and
4. Professional values and ethics.

The first three reflect fairly well identified professional roles, each with its special purposes, client populations, value bases, areas of knowledge, and complex skills. The fourth area--values and ethics--reflects an area of concern in all professional roles which involve intervention into human systems.

Three distinct phases of work were identified in the original proposal, each addressing special objectives and target programs. While they started sequentially, during most of the project period work has progressed on all three phases concurrently.

Phase One focused on the Ph.D. Program in Organizational Behavior, and included (1) an analysis of professional competence in all four areas as these competencies are currently practiced by the more creative professionals in the field; (2) experimenting with a variety of learning approaches and modalities for developing and assessing competence; (3) redesigning the Ph.D. curriculum to incorporate the more promising approaches; and (4) implementing the new design with students entering the program in September, 1975 or later.

Some of the things we have learned about the nature of competence in practice are set forth in Part II of this report which also reflects on their implications for the design of learning programs and experiences. Part III presents the new framework of Ph.D. curriculum, describes significant learning strategies and arenas within it, and discusses some of the problems we have faced in our efforts to innovate at the Ph.D. level.

Phase Two addressed similar issues at the professional master's degree level. Our initial intention had been to experiment and develop innovations within the context of the School of Management's evening MBA and Master of Science in Management programs. Two events occurred which led to a re-direction of this effort. First, a decision was taken within the School to move toward a large full-time day program to be planned in 1976-'77 and implemented in the

Fall of 1977, which would then be used to set the pattern for the evening program. Significant alterations in the MBA or MSM programs would have been premature in early 1975 when Phase Two was to start. Second, several people from various organizations who held some kind of responsibility for planning or development approached us about providing advanced training in organizational development (OD) technologies.

Consequently, we redirected our Phase Two efforts to designing and implementing a new program which would be entirely competency-based, leading to a Master of Science in Organizational Development (MSOD). After nine months of intensive planning and development, the implementation of the program began in September, 1975 with 26 new students drawn from managerial positions in industrial, health, and public service organizations. The bulletin announcing and describing this program is enclosed as Appendix F. The first group of students has now completed about two-thirds of the program. Part IV of this report describes the content and learning process and reflects on our experience with this program to date.

Phase Three of the project has been aimed toward the evaluation and generalization of the investigations and innovations in Phases One and Two and toward the dissemination of competency based learning approaches to other related programs in the Applied Behavioral Sciences and management and to professional associations involved in training or accrediting professionals in this field. Part V describes the activities undertaken towards these ends, including a note on contributions to theory and strategy of educational development.

Part VI of this report deals with some of the problems and conflicts we faced in project work. Five generic dilemmas are identified and discussed which bear on the process of innovation and development in educational programs.

On Project Evaluation Given the Present Stage of Implementation

The condensation of a planned three-year cycle into two years, in conjunction with the phasing of the learning designs and curricula in the Ph.D. and MSOD programs, creates some limitations to the conclusions one can draw about the extended consequences of our innovative endeavors.

The first group of Ph.D. students in the new curriculum format have been in the program just one year and are still relatively early in their graduate careers. They have gone through an intensive, on-campus learning process, but have only begun their major field experiences. Assessment activities to date have focused mostly on intellectual abilities and grounding in theory and knowledge; those activities which would tap their competence in application and system intervention still lie ahead. Consequently, we are able to evaluate only limited parts of the program at this time in terms of its impact on student growth. A comprehensive assessment of the program, in these terms, is of necessity still a year or two (perhaps even more) away. Nonetheless, a preliminary evaluation of the process and of some of the program elements has been undertaken and will be reported herein.

Students in the MSOD program are now about two-thirds of the way through. As a result of the design of that program, we are able to reflect on its adequacy and creativity more completely than for the Ph.D. program, but here, too, a final evaluation is considerably premature.

The current indicators show very exciting results but we are nowhere near the "bottom-line" (the development and assessment of competence in students which enhances their effectiveness in professional work after graduation) with regard to either program--and ultimately this is what really counts. We have tracked our activities as we have gone along, stepped back to analyze what's working and what isn't, and re-directed our efforts where indicated by the feedback or where new learnings or insights suggested new possibilities. Our conceptual approach to program and project evaluation has grown; we have been able to use it as an on-going self-corrective process at some critical points over the last two years. But we are also more sober about the difficulties of demonstrating long range consequences.

This report is intended to be both descriptive and evaluative. In its major parts (especially Parts III, IV, and V) one will find descriptions of what has been done and of the products of those activities; along with them is a reflection of our evaluation according to various criteria. As much as possible, we shall share our doubts and questions, as well as our positive conclusions, our failures as well as our successes.

II. ON THE NATURE OF PROFESSIONAL COMPETENCE: IMPLICATIONS FOR THE DESIGN OF LEARNING PROGRAMS

The initial major task in Phase One involved an investigation into the nature of and criteria for competence in the four focal areas as they are practiced by professionals in the field. The analytical work was done by four focal competency teams (one for each area) each consisting of one or two faculty and two or more advanced doctoral students. Their work then led to a period of experimentation with various learning activities and to the formation of a curriculum design group, the work of which will be reported in the next part of the report.

Appendices A-D provide summaries of the conceptual work of the focal competency teams, including overviews of criteria for assessment and major features of learning strategies for developing competence at the Ph.D. level. While each of the focal competencies have unique distinguishing features, there are also several generic competencies which are present across the board. Of greater significance, we have learned some things about the nature of competence in general which have important implications for the design of educational experiences:

1. Competence always has a context;
2. Competence is rooted in a knowledge base and analytic skills;
3. Competence and values are inevitably interdependent; and
4. Competence involves the whole person.

A brief consideration of these premises will help set the stage for discussions of the program innovations reported in the next two parts.

Competence Always Has a Context

The term competence, as commonly used, indicates a property or characteristic of a person--a capacity or ability which exists in the person. Yet its relevance is more often in terms of the person's environment; he or she has an ability to influence conditions or the course of events outside of him/herself. Competence and effectiveness are closely related conceptually. They both refer to an ability to produce an effect.

From the educator's point of view, the emphasis is on what is assumed to be an enduring capability in the person, once it is acquired. But the relevance of the capability is measured in terms of effects actually created, and these always occur in a concrete situation. Hence, a competency is always manifested or demonstrated in some environmental context. An effect--an outcome of some kind--is always a combined result of factors in the person and in the situation. What one is able to accomplish easily in one situation may be much more difficult in other circumstances.

Where conditions are relatively constant or easily controlled, this may make little difference, e.g., on an assembly line or in carefully contrived and managed classrooms. By contrast, professional work in the Applied Behavioral Sciences, and in many other fields, calls on the person to be effective in many different circumstances. Moreover, if one is planning and managing change, the circumstances in which he/she works must also change. One of the hard learnings for many of us over the last decade is that things we do successfully with some populations (e.g., middle class whites) may not work so well with others (e.g., welfare mothers or militant blacks). Similarly, a problem solved with relative ease in a small, well organized firm may be quite intractable in a large system faced with many political cross-currents. The small group and the urban complex may be contexts for similar issues, but what intervention proves effective in one will not necessarily transfer to the other. In this sense a competency--perhaps any technology--has a limited range of relevance. To broaden this range requires a considerable adaptation and expansion of abilities.

We face here a problem of distortion through abstraction. At a very high level of abstraction, we can describe a competency (a capacity in the person) that seems to be valuable in most any situation--intelligence, for example. There are generic competencies which enable the person to interact with various contexts (analytic skills, interpersonal communication skills and the like). While they are essential in a great many professional situations, we cannot fully understand them by ignoring the specific context in which they are used. More importantly, development of competence is not served by defining competence at a very high level of abstraction. We can train a person to analyze a problem in a given situation; we don't even know how to begin to teach him "intelligence."

If highly abstract descriptions of competence are too ambiguous or too difficult to measure and use, we face a related problem in trying to seduce and concretize them. Competency-based education has been strongly criticized for analyzing competence to bits--literally. To break a complex social intervention, like an O.D. program, into small units of behavior (moment to moment actions in various situations) is not only an endless task but a fruitless one as well. While analysis is essential, one runs the risk of missing the organic integrity of that which produces the effect. Moreover, analytic division of a competency into its smallest elements would have to be repeated in each new context if consequences are a joint product of competence and circumstance. Fractionation is not the answer.

We can identify at least three implications of all this for the design of competency-oriented learning strategies. (1) The learner needs models and modalities for "tuning-in" to a wide variety of environmental contexts. This field requires a high tolerance for ambiguity (which can be expanded through experience and social support) because of the frequency of entering new situations. Equally important is the learning of methods of inquiry, situational diagnosis, relationship building so that the person can rapidly adapt himself and his intervention skills to the realities of the situation.

(2) The development of competence requires experience in various contexts, especially in field situations like those in which he/she will perform as a professional. A program which limits learning activities to the classroom and one's desk, and one which keeps the learner in a single limited role (i.e., passive student) not only will fail to generate much competence applicable to changing circumstances, but also may produce what Miles calls a "learned incapacity" for effective professional intervention. A competency-oriented learning program must take him/her into the field in as much of its variety as possible.

(3) The assessment of competence also has a context. Usual testing procedures and contexts are often very unlike those situations in which one would like the learner to become effective. All too often we find people highly competent at test-taking and paper-writing who don't know what to do when they get out in the field. Their development of competence occurred after graduation

because their educational programs emphasized the wrong context for demonstrating their abilities. Therefore, however "objective" and "controlled" typical testing procedures are, their validity for measuring professional competence is in doubt. Assessments (or the data for them) must also be generated in a variety of field settings or in situations which simulate them closely.

Competence is Rooted in a Knowledge Base and Analytic Skills

With all of our emphasis on experience and active practice, we have come to recognize how thoroughly the effectiveness of the Applied Behavioral Scientist is based on his/her understanding of the client system, its internal dynamics, the forces which maintain or change it, and its possibilities for further development. While one can quickly learn the jargon and role-trappings of the field, these are only facades; too many practitioners are flying by the seat of their pants. The more creative professionals in the field think hard about what they are doing. There is much wisdom in Kurt Lewin's counsel, "There is nothing so practical as a good theory."

A competency-oriented program must direct itself to the need for a knowledge base and the conceptual and analytic tools which are essential for system diagnosis, planning, and evaluating social interventions. But there are unique qualities of this need which build on but go beyond the generation and internalization of academic knowledge. Educating for competence recognizes the importance of a knowledge base and the role of theory and makes these available in contexts appropriate to their learning. It also makes opportunity for practicing analysis, diagnosis, creative synthesis, and model building.

Competent professionals are able to use a variety of conceptual models to help them and their clients see more clearly what they face and what opportunities exist for problem-solving, improvement and development. One must be able to quickly invoke a variety of theoretical frameworks and conceptual models and to shift from one model to another (or even invent a new one) when his current framework is inadequate or unproductive. He needs to be able to go back and forth between the concrete realities of the situation and abstract theories which help him understand those realities. To know the theories but not be able to recognize the fact (the actualities) those theories purport to explain is no more competent than to know the facts without a framework for understanding them. A spirit of inquiry (treated more fully in Part III) is the creative force for the field.

Competence and Values are Inevitably Interdependent

It has long been fashionable to separate questions of science and questions of values, for many reasons both historical and current. Nonetheless, a "value-free" science is probably a misnomer in the physical and biological sciences; it certainly is in the social and behavioral sciences. More importantly, values uninformed by knowledge of how things work or what leads to what are largely irrelevant and useless. Our inquiry into professional values and ethics in the Applied Behavioral Sciences is leading us to the conclusion that many (perhaps most) of the important learnings with regard to values are best acquired in the actual context of learning the knowledge and skills for working in the field. One can separate understanding and valuing conceptually, but they function together in the human mind. We place value on the things we comprehend, willy-nilly, and the valences change with changes in the way we construe the world. So it is with the larger human enterprise: science and technology interact with social values and we live with the combined results of both.

In newly emerging professional fields (as in the older ones) there is also a strong tendency to emphasize the technology and to side-step the questions of values toward which it is applied. In a field which is focused on interventions into social systems, value issues cannot be ignored or denied. The development of competence and the development of a value-system to guide the use of that competence must go hand in hand.

Rokeach introduced the distinction between terminal values (those end-states or conditions which are valued in their own right) and instrumental values (those conditions or events which are valued because they lead to other desirable outcomes). In this sense, the attainment of relevant competencies _is_ an instrumental value--we value the competence because it enables the creation of valued outcomes.

Terminal values may become either sources of frustration or hollow platitudes if we lack the means for approaching and achieving them. If one values a particular social condition, he had best develop the competence for creating (or at least moving toward) that condition.

There is an additional reason for merging the learnings of competence and values, based on the distinction between "professed values" and values-in-action. Our minority groups and our youth have been quick to decry the hypocrisy in many of our institutions and leaders. The charge is that they say one thing and do another--they express in high tones values which they stand for, but act in ways which produce quite different outcomes. The latter represent values-in-action which may or may not coincide with those professed. Addressing and clarifying the values implicit in the act or its consequences is one of the most important learnings in the development of competence.

Competency-based learning programs need to build value analysis and clarification into learning experiences in the field, not just as an afterthought nor as an abstract set of maxims or principles to profess.

Competence Involves the Whole Person

Competence has often been treated as a combination of knowledge and skills which can be added on to the person as one adds a tool to a kit-bag. The concept of a technology--impersonally, mechanistically described and taught--contributes to this notion. Yet it is always a person who acquires (should we say, attains?) and uses the competence. The professional doesn't bring just a tool-kit to do the work, he brings himself, with all his needs, hopes, fears, blind-spots, predilections, and strengths.

While some of these personal qualities sometimes get in the way of good work, they are often the source of the competence itself. One's heightened need for affiliation may be the well-spring from which a highly developed empathic ability and interpersonal competence grow. An area of tension, under proper growth conditions, becomes a source of strength. It is not by accident that one of the country's outstanding practitioners, on returning later in life for a Ph.D. writes a dissertation on the creative uses of the self in consulting.

Another eminent leader in the field identifies personal courage as a prime necessary element in an organizational development competence.

Of the total set of capabilities relevant to social intervention, no one person will incorporate them all, more probably only a relatively small range of them. There are two points to be made here:

(1) Whatever the person's level of competence, it will include some range of knowledge, skills, and values and whatever personal dynamics influence his/her use of these in various situations. Their personal factors may sometimes hinder effectiveness, but just as often they will contribute energy, vitality, and strength to his/her work. Under no condition can they be removed from the competency equation.

(2) To treat knowledge and skills as tools to be picked up and added on would be to miss the creative adaptation and incorporation of these into a unified personal style. The objective of education is not to have Peter do something as Paul does it, but rather to have Peter do it as he can do it best. The development of a professional identity involves the integration of all those factors (knowledge, skills, values, personal strengths and propensities) into an organic whole which gives one's competence fluidity and creativity.

Implications for educational design are several. First, if we can recognize personal factors which contribute to competence, they can be used as part of the selection criteria for those entering the program. But selection alone will not be sufficient. Second, the program needs to have designed-in processes for nurturing personal strengths and potentials and for working through problems and tensions which might get in the way of effectiveness. A confrontation of self in a supportive climate helps the learner convert potential liabilities into strengths.

Third, in field practice the learner should be encouraged to work in his/her own way--not by the book--and should have access to relatively concrete, continuous feedback to support personal adaptation. Fourth, our press should not be toward having all students learn the same set of competencies, but rather in helping each develop his/her own set, capitalizing on his/her potentials and interests. Finally, opportunities and structures must be generated to facilitate the person's evolution of an integrated personal style and professional identity.

The Learning-Performance Dilemma

Inherent in competency-based education (perhaps in all education) is a dilemma faced by the student. Where one's emotional investment in being competent is high, anxieties about inadequacy or ineptitude also tend to be high. Students often find themselves in paradoxical situations masked by a fear of evaluation and a hope for recognition. One way of coping is through a guarded management of appearances--the presentation of a facade of competence, wisdom, confidence, or just "in-ness." Another is procrastination regarding activities which might test one's effectiveness or expose one's clumsiness. Unfortunately, these tend to stimulate faculty distrust, leading them to offering tougher or more "objective" tests and to tighten authoritarian controls.

A more benign way of coping with the fear of failure or exposure is to repeat the performances one is already good at, and stay away from the riskier situations which might be stretching and learningful. Herein lies the dilemma: to achieve and progress toward a degree requires the demonstration of effective performance, but to learn--to develop new competence--requires a sometimes risky delving into new situations and activities. The needs for learning and for demonstrating competence often conflict (or are experienced as conflicting). The student must manage the tensions involved in this conflict and address the reality of both needs.

Faculty face a companion dilemma. As educators they must encourage risk and accept failure and inept performances in order to encourage the realization of full potential. As evaluators they must hold students to high standards of excellence and give valid feedback about the adequacy of performance. How does the judge create and maintain a non-judgmental climate for learning?

The development of an assessment process must work with both these dilemmas.

III. PHASE ONE: INNOVATIONS IN THE PH.D. PROGRAM IN ORGANIZATIONAL BEHAVIOR

The Ph.D. Program has been both a laboratory for experimentation and a target for innovations in the CBL project. This part of the report addresses the outcomes of our experimentation and analysis in terms of innovations in program structure and learning process. In short, our work has focused on *how* the student learns, as well as what and toward *what ends*. What follows has been enriched by our inquiries into competencies as practiced by top level professionals in the field.

The first section presents a conceptual model of professional development upon which program innovations are based. This model identifies core strengths in the person which contribute both to learning and professional effectiveness, and three broad areas of competence relevant to professional work as an Applied Behavioral Scientist. It also spells out five stages of professional development, identifying focal learning processes and contributions to competence in each.

The structure and flow of the new curriculum is described in the second section, identifying several learning contexts and processes in line with the developmental model. The third section provides a preliminary evaluation of the program, indicating contexts and experiences which seem to be making significant or unusual contributions, activities which don't seem to be working well, and problems experienced which need further attention.

A Model of Professional Development: Goals and Assumptions

The Ph.D. is oriented to the training of behavioral scientists with a broad scope of knowledge from the several relevant behavioral and social science disciplines, with an orientation to human behavior and development in complex settings and socio-technical systems, and with a wide range of professional competencies--skills in teaching and research, but also in social innovation, organizational planning and development, conflict resolution, individual and group training and development, consultation on human and organizational problems, and the like. As specified in the Program Bulletin, "Each student is expected to:

1. "Obtain a thorough foundation in several academic areas pertinent to organizational behavior.
2. "Develop an ability to identify, diagnose and solve both theoretical and applied problems in organizational behavior, along with a dedication to communicating and utilizing knowledge in the context of real-life problems.
3. "Develop a high level of professional competence in the strategy and process of organizational development, interpersonal and group training and development, and in non-alienating, data-oriented methods of research on personal and social systems.
4. "Develop the ability to collaborate effectively with colleagues and to pursue individual goals in a personally rewarding and socially beneficial manner.
5. "Evolve a value system which confronts his responsibilities to society as a scientist, teacher, and professional practitioner."

The goals are broad, the things to be learned are wide-ranging, the competencies for effective action are diverse and challenging. The questions are, how to design and conduct an educational process which will do justice to the full scope of these goals and competencies, and how to help the developing professional pull it all together so that he/she can pursue a creative and reasonably unified life and career. Put differently, what is the professional identity of the applied behavioral scientist, and how can it be formed, nurtured, and enhanced.

There are, of course, many models of professional identity and our goal certainly is not to have all graduates of the program look alike. To the contrary, we assume each graduate must form his/her own unique identity, one that suits his/her own needs and aspirations, strengths and limitations. The personal rootedness of one's professional identity is one of the bulwarks of our educational philosophy--hence, we are always as concerned with who we teach as with what we teach.

Nevertheless, a professional identity has its raison d'etre in terms of what the person is able to create and contribute to the field. Thus, it is useful to consider the generic issue--what is the character of a well-rounded professional identity, and how can it be developed? The basic contention here is that, in addition to addressing what kind of person he or she is and what he or she knows, one must also ask what can the well developed professional do? "By their fruits ye shall know them, and not by their roots."

The point is that a meaningful professional identity derives, for any of us, mainly from the breadth and perceptiveness of our comprehension of ourselves and the worlds we live and work in and from the attainment of competencies for effective intervention into those worlds. A second assumption, in line with this, is that while we can do many things to nourish and support the person, to help him/her recognize, face up to, and ultimately accept who he/she is and how he/she functions, the most relevant way we can contribute to his/her personal growth is through helping him/her expand his/her comprehension, enhance his/her competence, and clarify and elaborate his/her values.

Basic Competencies of the Applied Behavioral Scientist

Let us return to the question, what is the professional identity toward which students in the doctoral program strive? What are the characteristics and competencies of outstanding professionals in the field who might serve as role models? There are two kinds of answers to these questions: What they are as persons and what they are good at doing. Many of them stand out as unusually "present," lively, "together" persons. They have a vital energetic approach to life. They have personal strengths (flat-sides as well, to be sure) which figure prominantly in the effectiveness of what they do. They are also knowledgeable and technically competent with regard to a wide range of professionally relevant activities. Their effectiveness and creativity is a joint function of personal strengths and professional competencies, and our analysis must take us into both realms.

Core Personal Strengths

Four personal qualities stand out as core strengths: a spirit of inquiry, integrity, humanistic valuing, and proactive interdependence. While these qualities are themselves subject to further development and refinement, they are also the fountainheads which give vitality and direction to the learning of professional competencies. Therefore, it is worth a moment to consider them here.

By spirit of inquiry we mean both curiosity and a lively intellect directed to finding out how things really work; a desire to be in full touch with reality, to understand cause and effect, to grasp and elucidate the complexity and mystery of human life, and to use one's mind for solving problems in the real world; a spirit of inquiry also involves an enduring commitment to one's own learning and growth.

The notion of integrity is often quite vague and platitudinous, but its meaning in this context is not just that the person is good, honest and moral. As a factor in professional identity, it refers to a quality of integration of self in professional work. It involves a high degree of self-insight, understanding, and acceptance (quite different than narcissism or self-preoccupation), relatively free of neurotic conflicts, blind spots, or self-deceptions. It does include honesty in the sense of genuineness in intentionality and commitment. Here, as in the spirit of inquiry, there is a "no bullshit" quality to one's quests and endeavors.

Many of the most creative and effective professionals in this field seem to have a deep concern about the human condition, are motivated to confront inequities and injustices, and are caring toward personal rights, hopes and aspirations. They continue to reexamine and refine their values regarding the individual and the social system and have an ethical (in contrast to moralistic or guilt-oriented) commitment to improving the human condition. It is in this sense that their appreciative system and internal valuing processes are humanistic. The connection between this and creative performance lies in their view of themselves not as technicians plying a trade, but rather as problem solvers and inventors pursuing purposes they care about.

One should note that a missionary zeal for human betterment can easily become a source of self-deception (e.g., denying one's demonaical tendencies), of alienation from others, who only see the person as a "do-gooder," or of "preaching" interventions, none of which smack much of competence. Nevertheless, humanistic valuing can be a well-spring for the development of competence because empathy and caring draws one towards other persons and towards the human aspects and problems of socio-technical systems which, in turn, feeds their inquiry and understanding. The implied sense of mission also motivates a quest for new and better modes of problem-solving, intervention and change, for one not content with ineffectual methods and procedures.

Proactive interdependence refers to the capacity to function autonomously guided by one's own purposes, perception, and sense of direction without that limiting his or her ability to engage in active collaboration or to recognize and fulfill the interdependencies between him/herself and others. The inverse of proactive is reactive, connoting a dependency on the situation or on others in it, much like other-directedness. But an inner-directedness which holds one aloof or isolated from others undermines competence because of the lack of engagement and responsiveness. Proactivity involves a tendency toward action, a commitment of energy to the task at hand, a readiness to move into the problem, issue, or challenge.

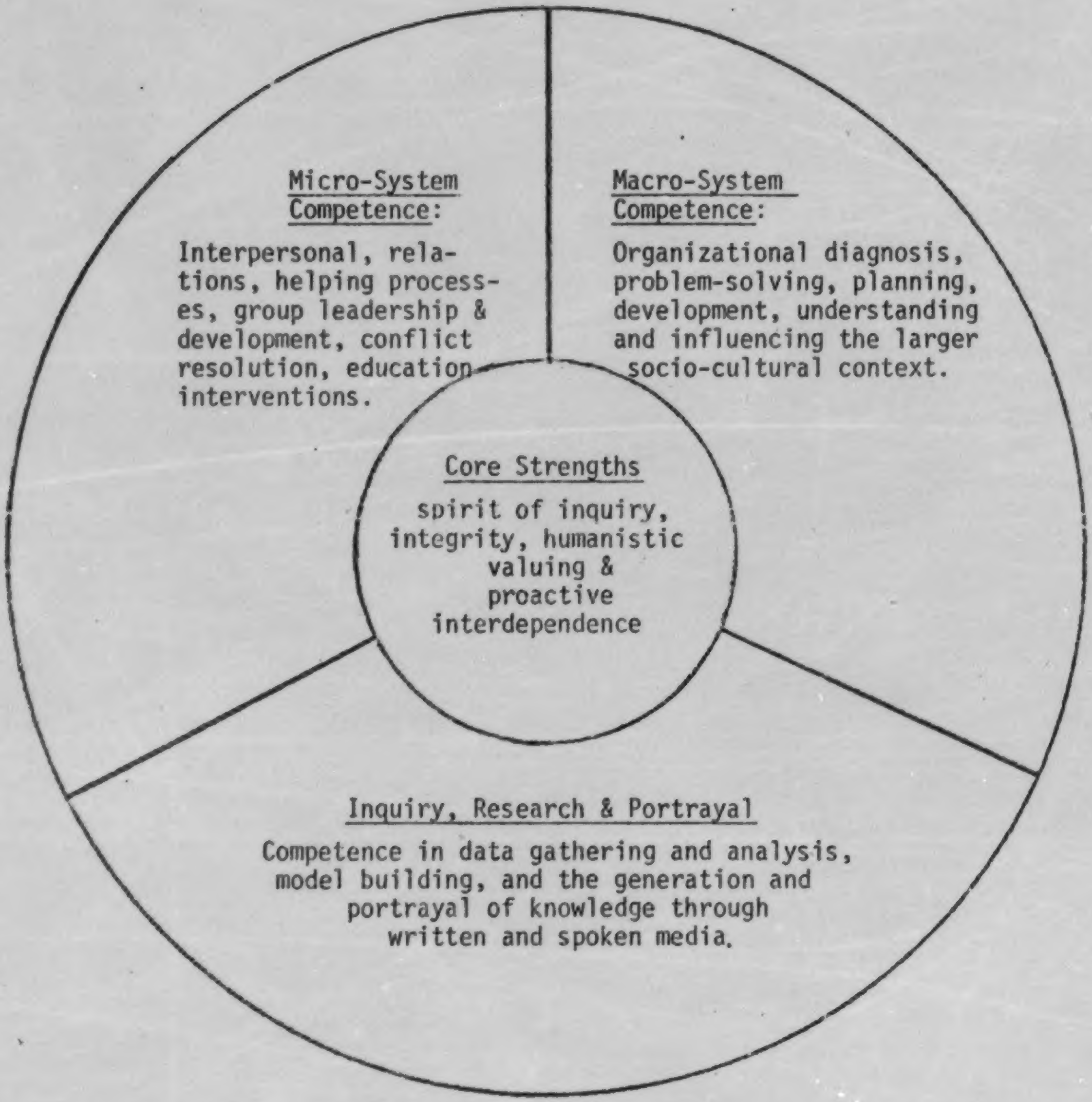
These four qualities--spirit of inquiry, integrity, humanistic valuing, and proactive interdependence--make for competence in a wide variety of endeavors, including the learning of requisite knowledge and skills for professional work. They form a core around which other competencies are built. Growth, enhancement, and mobilization of these qualities are part of what constitutes the development of a professional identity.

Focal Professional Competencies

Figure I portrays the domain of competencies of special relevance to the Applied Behavioral Scientist, which give professional potency to the person's core strengths. These are competencies in the generation and utilization of knowledge and for intervening developmentally in micro-systems (persons, relationships, groups) and macro-systems (organizations, institutions, communities and the larger social nexus).

Micro-System Competencies. For working with individuals, relationships and groups, the professional is competent in forming and helping others form open, effective, rewarding interpersonal relationships. He is able to engage in a variety of helping processes--counseling, coaching, supporting, confronting, clarifying, directing, and providing valid, useful feedback. He is able to provide leadership and direction for groups and to facilitate the development of healthy groups and effective teams. Conflict management and resolution skills are also highly developed with the professional being able to apply them both as a third party to others in conflict and as a principal who finds him in conflict with others. Finally, he is skillful in the design and implementation of a wide variety of educational methods and interventions and can plan and support the learning and growth of others in simulated and real-life settings.

In addressing issues at the micro-systems level, one draws on concepts, models, methodological approaches, experience from social, organizational, and clinical psychology, group dynamics, and other related fields. Significant understanding for helping others grows out of a rich history of interpersonal and group experiences, out of well trained empathic abilities, and out of a high



Micro-System Competence:

Interpersonal, relations, helping processes, group leadership & development, conflict resolution, education interventions.

Macro-System Competence:

Organizational diagnosis, problem-solving, planning, development, understanding and influencing the larger socio-cultural context.

Core Strengths

spirit of inquiry, integrity, humanistic valuing & proactive interdependence

Inquiry, Research & Portrayal

Competence in data gathering and analysis, model building, and the generation and portrayal of knowledge through written and spoken media.

Figure I Focal Professional Competencies in Relation to Core Personal Strengths

degree of self-awareness and acceptance. Comprehension of how the concepts and models apply to one's own behavior and experience facilitates the translation of abstract conceptualizations to pragmatic applications in consulting with others. Knowing theory in this personal as well as in the general sense makes it a good deal more than "academic." Knowledge and compassionate understanding merge into wisdom to guide one's active intervention. (See Appendix A for a more complete characterization of competence in working with persons and groups.)

Macro-System Competencies. Competence at the macro-system level involves the ability to diagnose and solve a wide variety of problems in organizations and communities. While special expertise often concentrates on structure, process, and interpersonal and intergroup relations, the social and the technological/economic/political/legal aspects of problems are so intertwined that a complex systems orientation is almost essential. The professional consultant with large scale systems has a knowledge base and methodology drawn from general systems theory, sociology, survey research, cultural and applied anthropology, and organizational theory, as well as on the micro-system disciplines.

Strategic planning for the development of organizational effectiveness is central, where effectiveness is conceived both in terms of the system's ability to achieve its objectives and manage its resources and environmental relations, and in terms of its contributions to the health and fulfillment of its members. Intervention skills vary widely as new tactics and techniques are developed each year. Perhaps of greatest significance is competence in inventing new approaches to system intervention. (Appendix B treats the macro-system competence more completely.)

Inquiry, Research and Portrayal Competencies. A spirit of inquiry, while vitally important, is only the starting point. However "applied" the professional is in career orientation, he must be something of a scientist if he is to be effective. He must be able to use a variety of research methods to give his inquiry scope and penetration, including competence in data gathering, analysis, and interpretation. Facility in conceptualizing social process and building new conceptual models adds potency to his diagnosis and planning as well as contributing to the further development of the field. A creative consultant is active in the generation of new knowledge and skillful in writing and portraying concepts, theories, and analytic frameworks to diverse audiences and for many purposes. (See Appendix C for a broader treatment of the inquiry-research-portrayal competency.)

Conditions and Processes for Competence Development

The discussion above treats the competencies our students seek to master. We turn now to the learning process and to the creation of conditions to enhance learning. In this framework, learning involves the expansion of comprehension, the attainment of competence, and the elaboration of an appreciative (value) system. Learning processes are both intellectual and experiential, i.e., they involve both the acquisition of knowledge and analytic/conceptualizing skills and the direct observation, experience, and practice in pragmatic interventions in large scale systems.

Learning activities and contexts tend to change as the learner becomes acquainted with the field/begins to function within it. Five stages of learning can be identified in the development of the more creative practitioners. This sequence of professional growth is portrayed in Figure 2. As will be noted, the top of this model is a reproduction of Figure 1, reflecting the core strengths and three areas of professional competence to be developed. The vertical dimension represents the five stages of development through time, running from bottom to top.

These five stages overlap considerably, and most professionals recycle through parts of the sequence several times in their careers. Should one ever discontinue learning new concepts and theoretical frameworks, or trying out new techniques? These are stages in the sense of periods of heightened emphasis and in the sense that significant progress in one stage makes entry into activities in successive stages easier and more productive. Many practicing professionals in the field, in fact, begin at 2 or 3 only to discover the need to go back and pick up stage 1 learnings. Others who started at stage 3 have not gone back. They tend to be limited in their growth and competence, and are unlikely to ever reach stage 5.

Conceptual Grounding. Development often begins with becoming grounded in a broad domain of concepts and theories and facile in the use of these as aids to understanding concrete situations. Traditional methods of lecture and discussion, reading and writing, are germane to this task, but so are various awareness-raising workshops, experiential exercises, and observation and analysis in field settings. Comprehension of self is enhanced through group interaction, maintaining a diary of significant experiences and insights, the use of various structured methods of inquiry into self, and the like.

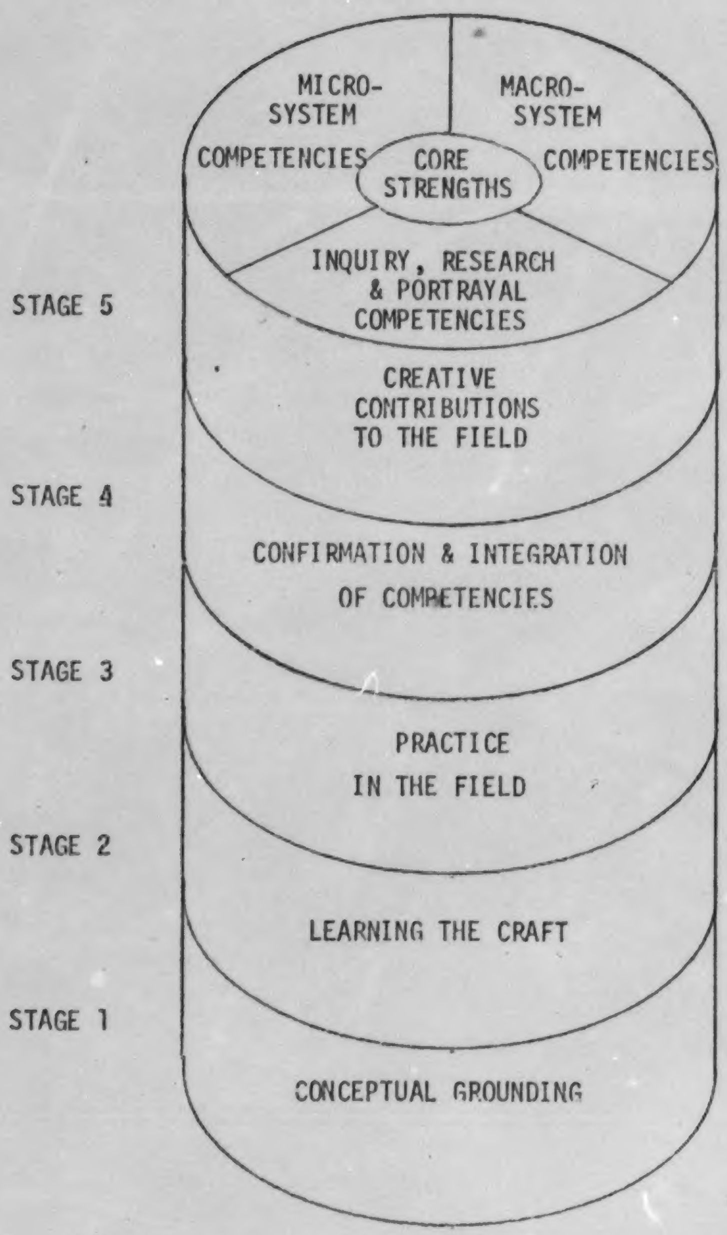


Figure 2. Five Stages in the Development of Professional Competencies

Learning the Craft. The attainment of action competencies comes, in small part, through a cognitive understanding of the craft, but mainly through practice--through performing, gaining feedback on the performance, critiquing the consequences (intended and otherwise), and exploring alternative ways of performing. Active experimentation, observation, and reflection are all necessary components of skill development.

Drawing a distinction between the craft and the art is useful here as in other fields. To become a painter, one needs to understand the medium, to learn techniques of color mixing, creating textures, composition, perspective, effective use of tools, lighting, etc. Facility with these and other things constitute the craft. They alone do not make him a creative artist, but they provide the vehicle. A poet needs to be a wordsmith in addition to having something to say.

Similarly, the Applied Behavioral Scientist needs to learn the craft (some would say the discipline) of research, analysis, diagnosis, intervention, and the like--the basic skills upon which to build his/her art.

Practice in the Field. Joined together, the craft and the conceptual grounding constitute a superstructure for competence. Used dogmatically, they become mechanistic, alienating, and ineffectual--a set of constraints which limit all but the most simple problem-solving. Newcomers to the field often fall prey to the "law of the hammer" (give a child a hammer and he spends the next four hours pounding on everything in the house), and use in every setting those techniques they have learned. Nonetheless, through continued practice in field settings, knowledge base and craft merge into an artistic competence.

The period of active experimentation and exercising new competencies in the field is challenging, often frenetic, and exciting for the developing professional. It is also a period of divergence of energy and attention, doing this here and that there, trying out a technique with one client and abandoning it in favor of another with a different client, and searching always for new opportunities to practice and learn.

Confirmation and Integration of Competencies. At some point it becomes appropriate to step back, reflect on one's experiences, and consolidate one's learnings. This is a time to assess and confirm the competencies which have been developing, through formal or informal recognition by significant others in the field. It is also a time to organize and integrate them into a larger image of who one is as a professional, and from this to become more purposive in the development of a central, directional thrust to one's efforts. It is at this point that one is prepared to make a creative contribution to the field.

Creative Contributions to the Field. The culminating process in professional development goes beyond competent performance of one's art. It involves a creative extention or advance in the state of the art. For many, this is reflected in new conceptualizations or contributions to the knowledge base. For some, it involves the development of new inquiry or intervention techniques. For most, it involves active contributions to the development of other younger professionals.

While one cannot know very far in advance just what creative contributions may come from a budding professional, it is possible to create a supportive, stimulating climate, usually through close colleague and mentor relationships, which reinforces the need and potential for creativity. But here, as in the other stages, development accrues from proactive pursuit and active practicing.

The New Structure of the Ph.D. Curriculum

The program has been redesigned to reflect the five-stage developmental sequence and to strengthen learnings in each stage. The structure of learning activities is portrayed in Figure 3. The five stages (and typical corresponding time periods) are identified on the left, though in reverse order from Figure 2--i.e., time flows from top to bottom. The three focal areas of professional competence are represented by the columns. The development of core personal strengths, while receiving a great deal of attention in the program, is not represented in Figure 3 because much of it comes in the context of a network of personal relationships with faculty and peers. Structured activities relevant to personal growth are discussed in the text below.

The First Year: Toward Conceptual Grounding

The program begins with major attention to becoming grounded in concepts, theories, frames of reference and analytic methods through six pro-seminars organized around bodies of literature and system levels. At the micro-system level these include personality theory and approaches to individual development and growth, interpersonal relations and group dynamics. A course in organizational psychology bridges the micro and macro levels. Focused on the latter are pro-seminars in organizational theory and analysis and social analysis addressing the socio-cultural level. In each of these, the emphasis is on analytic processes

Developmental	Focal Professional Competencies		
Stage (Years in Program)	Micro-System: Person, Interperson, Group	Macro-System: Organization-Community	Inquiry, Research Portrayal
1. Conceptual Grounding (1st year)	Proseminars: Group & interpersonal Analysis; Personality theory & Developmental Processes	Proseminars: Organizational theory & analysis; Social Social Analysis	Proseminars: Grounded approaches to Inquiry and Research
	Comprehensive examination of knowledge base & analytic abilities.		
2. Learning the craft (2nd year)	Practicum: Small Group Training Methods	Practicum: Organizational Development Consultation	Practicum: Research Methods
	Summer Field Internship		
3. Practice in the field (2nd-4th years)	Conducting workshops and labs, teaching, counseling	Participation in OD projects, consulting with organizations	Individual and collaborative research projects writing
4. Confirmation & Integration (3rd-4th years)	Assessments and Confirmation of Competencies through faculty/peer review of Portfolio. Integrative Seminars		
5. Creative Contributions (4th-5th years)	Dissertation and Final Oral Examination Educating Others through training and supervising practice		

Figure 3. Matrix of Structural Learning Activities in the Ph.D. Program.

and skills as well as on content. A pro-seminar in grounded inquiry, aimed toward helping each student identify, sharpen and elaborate his/her own native modes of learning and discovery, rounds out the first year's course program. While all the pro-seminars have prescribed materials to cover, they are highly participative in style, use experiential methods, and provide opportunities for students to pursue particular interests.

Early in the first year students and faculty advisors work to create open, trusting, committed relationships which provide support for adaptation to the program, opportunities for planning one's course of study, and a context for self-exploration and feedback, and encouragement for risk taking in unfamiliar learning contexts.

During this and the following years, students also participate in laboratories and workshops designed to facilitate adaptation to the learning community, the development of significant supportive and developmental relationship, self-exploration, values clarification, and planning for the acquisition of competencies. They also engage in departmental R&D projects which provide an observational/experiential base and a professional role context for entry into field practice.

At the end of the first year, students write a comprehensive examination to gauge their conceptual/analytic abilities and their knowledge of concepts and models relevant to the three focal competencies. An off-campus summer long internship at the end of the first year provides a deeper, independent experience in organizational observation and analysis and a further "trying-off" of professional roles and activities.

The second academic year is pointed toward learning the craft of professional work through practicum-seminars in research methods, in organizational development and consultation with large scale systems, and in training and leadership in small face-to-face groups.

The group training practicum has the students serve as co-trainers in laboratories and workshops under the supervision of experienced professionals. Through the use of video-tapes and participant feedback, students critique the issues and problems which arise in their groups as well as the effectiveness of their interventions. Seminar sessions on the theory of training, helping processes, styles of leadership, and the like, augment the concrete experiences in practicing in live groups.

The O.D. practicum addresses issues of entry, diagnosis, strategic planning, intervention, evaluation, and the mangement of consultant/client relationships. During the middle six-seven months of the practicum, student teams plan and conduct supervised O.D. projects in companies or human service agencies within the Cleveland Metropolitan Area. Regular meetings with experienced professionals are held to critique the intended and unintended consequences of the teams' interventions and to generalize learnings from the experience.

The research practicum addresses the usual range of social science research methods, but also concentrates on the strategy and skills involved in quasi-experimental field studies, action-research, and program evaluation research. Students design, conduct, analyze, and write reports on individual projects in field or laboratory settings.

The Middle Years: Practicing in the Field

During the second year and on into the third and beyond, students take increasing responsibilities for field projects, exercising inquiry and applied competencies, and building a portfolio of field performance assessments in the three areas of focal competence. Students also write original research and conceptual papers based on their field experiences.

Throughout the first three years, students are engaged in active, supportive, and sometimes confrontive relationships with other students and faculty. Through these they learn the skills of collaboration and proactive interdependence, face up to and work through value/ethical issues in practice as they arise, and experience themselves more clearly as emerging professionals. These relationships constitute an on-going context for feedback, critique, and redirection of learning efforts.

Confirmation and Integration of Competencies. Advanced students in the program participate in a continuing integrative seminar, designed to address the need for unifying the diverse elements of the field, to press into cutting-edge issues, and most of all, to help each student integrate his/her experiences and sharpen his or her personal, professional thrust.

As each student is ready, he or she joins with a selected group of student and faculty colleagues to review his/her portfolio of experiences and assessments, to confirm his/her attainment of competencies on which to build a professional career, and to set directions for further learning. When this group attests to the student's qualifications (this may take several meetings), he or she moves on to an independent project and writing a dissertation. A full discussion of our orientation to assessment is found in Appendix E.

Toward Creative Contributions to the Field

With all the emphasis on field experience and skill development, one might conclude that our primary goal was the training of practitioners--journeymen, some might say. But this is far from the case. Indeed, we aspire to high levels of professional competence in our graduates, and some will move on to careers in private practice. Our goal, however, is to develop creators of the field for the future--innovative leaders, theory builders, and educators of future practitioners. Thus, many of our graduates will pursue careers in academic institutions and R&D centers, and some aspire to key policy-maker positions in government or in health and human service organizations, or in institutions focused on public policy and social change. For these as well as for the creative private practitioner, well developed professional competencies are the platform from which creative endeavors move forth.

The creative thrust also needs nurturance and development. Throughout the program, we encourage students to question the present state of knowledge and the art--to invent new models and try out new, self-designed, inquiry and intervention methods. The focus on inquiry-research-portrayal competence is to encourage knowledge development as well as use. The program teaches the student to be a self-directed learner and reinforces his commitment to life-long learning. This cultivation of the creative urge begins to come to fruition as the candidate is confirmed in his basic knowledge and competence.

The Ph.D. here, as elsewhere, requires a significant independent investigation and a written dissertation. Many would question its relevance for professional (if not for academic) work, and would loath to hold forth most dissertations as acts of creativity. We are not so cynical; we believe that the disciplined inquiry, analysis and conceptualization are often highly developmental experiences. Many of our candidates pursue, in their dissertations, issues of substantial significance to processes of social intervention or professional practice. Through collaboration and support in undertaking non-traditional, even risk (in contrast to sure and easy) topics, a bent toward creativity finds nourishment and a channel for expression. Other channels are found in papers written jointly by faculty and students, field trials of new training designs, adopting O.D. strategies to community development, and the like.

On Responsibility for Learning

Since it is through the student's own attention, effort, and energy that learning occurs, primary responsibility for the expansion of comprehension, competence attainment, and elaboration of values rests on the student. Proactive reaching for learning makes it happen; resistance and defensiveness block development. It is especially important for students to experience themselves in professional roles, something which cannot be done without shouldering the responsibility for performance. Dependency on faculty, other than for temporary purposes, is generally counterproductive for learning.

The tasks of faculty are:

1. To develop and maintain the structures, conditions, and climate for learning.

2. To generate and provide resources, including, of course, their own knowledge and analytic ability.
3. To generate access to off-campus learning contexts and resources.
4. To serve as a role model and mentor as an Applied Behavioral Scientist.
5. To guide, help, support, confront, and reinforce the student's own self-directed learning efforts.
6. provide feedback on various dimensions of the learner's performance.

When these are done with collaborative participation of students, a learning community emerges and faculty and students contribute to one another's learning.

A Preliminary Evaluation of CBL in the New Ph.D. Curriculum

Historically, the Ph.D. Program has been unique, innovative, rewarding for its members, and a source of pride for the department. We have always graduated students with impressive maturity and professional competence, many of whom subsequently have developed unusually creative and productive careers. A few have also achieved academic distinction.

Over the last six or seven years we have worked to improve our level of academic excellence, and quite successfully, though sometimes to the detriment of the action-oriented work on which our reputation has been built. The goal of the CBL project has been to strengthen, solidify, and integrate the development of professional objectives of the program. (The issue of balance will be discussed more fully in Part VI.)

At this point we will not attempt to evaluate the program in terms of its academic objectives. Our concern here is to reflect as judiciously as possible on the program as it contributes to the learning of competencies to be utilized in professional work in the field.

In general, the program is stronger today than it has ever been in the past, partly as a result of recent innovations and alterations in its design, but mainly because of dedicated and creative efforts on the part of those implementing the design. The program elements which have received special attention in the project and have been built into the new curriculum seem to be working well. Some of the things we have experimented with have been significantly altered (and in one or two cases, abandoned) as a result of the experimentation.

It remains to be seen whether there is a significant increase in the competence of our graduates in the future. For that matter, we will know a great deal more about the total efficacy of the program when the first group of students under the new curriculum reach stage 4, Confirmation and Integration of Competencies (in their third or fourth years.)

In spite of our general sense of progress and enthusiasm about the program, it is by no means perfect, nor without important unresolved issues. We even recognize some new problems which stem from some of our innovations. A more differentiated evaluation of various aspects of the program as it currently exists will make this clear.

On Learning a Knowledge Base and Conceptual/Analytic Skills

The concentration, in the first year curriculum, on learning concepts, theories, and analytic frameworks is based on the assumption that knowledge and analytic abilities are the foundation on which competence is built.

Strengthening this foundation has been a major task over the last two years. Half of the first year proseminars are newly created. The others are substantially enhanced with new content, tightened-up in organization, and toughened in terms of expectations for student and faculty performance. We are teaching more and demanding more, and (as elsewhere when this occurs) students are griping more but working harder at learning.

The second significant improvement in the design of the first year course program is found in the way the proseminars relate to each other. While each course reflects content emphasis in one of the three competency areas, courses were jointly planned to enhance the linkages across areas as well as from one course to the next within a competency track. By relating content and experiences back and forth among the proseminars, students experience the first year as a unified program rather than a fractionated sampling of disparate fields.

The written comprehensive examination has been moved to the end of the first year. As a group, the students who have gone through the new first year have performed well on the exam as past students who have taken it at the end of their second or sometime in their third year. Roughly the same proportion now and in the past turn in outstanding papers. A quarter of the students failed on their first attempt, and this also matches our past experience with the comprehensive in spite of it now being given earlier. With selection criteria and examination standards held constant, we take this as evidence that first year students are now learning more theory and developing analytic writing skills faster than their predecessors. At least they are prepared for and meet performance standards on this dimension earlier than in the past; postponement into the second or third year is not required.

The concentrated acquisition of a knowledge base seems to be working, but at some cost which needs to be recognized. First, the level of tension is substantially higher among first year students than in the past; the common anxieties (along with excitement) involved in entering a challenging program now have added to them the fears of failure leading into the exam. There are now more direct expressions and indirect symptoms (e.g., withdrawal, absenteeism, writing and study blockages) of student dissatisfaction than in most former years. We need to find better ways of managing and coping with these tensions. On the other hand, those who have passed the exam are considerably relieved; they enter the second year with more energy and a sense of liberation to move on to the development of field and research competencies.

A second issue we are tracking at present is a bit more subtle. While students are gaining more knowledge in the first year, they may know less at that time about the application and utilization of that knowledge in field settings; there seems to be less grasp of the relevance of the various concepts and theories for professional work. Motivation for learning seems to focus more on getting over the examination hurdle than on the pragmatic utility of analytic concepts and methods. They know more, but with less appreciation of why they should know it. With more interplay between conceptual learning and field experience than we now have in the first year, the utilization of knowledge in professional work might be enhanced. The question is whether the separation of knowledge acquisition and field application in different years supports a view of concepts and theories as only "academic." If so, we fall back into the trap of traditional academic programs, i.e., what one learns in school is unrelated and irrelevant to what one later learns in doing the job. We are hopeful that we can manage the transition from stage 1 to stage 2 in ways that support integration rather than separation.

The third problem is related to the first two, especially in terms of student motivation, but it has quite different roots. Most of our students have had some taste (often a great deal more than a taste) of related professional experience prior to entering the program. They are attracted to the program in part because it offers an avenue to high level professional competence and because of our emphasis on non-traditional approaches to learning, especially those that involve direct engagement in field settings. An unintended message in the structure of stage 1 is, "put those interests aside for a year -- act like a student" which at times seems like forever. When read in this way, the press on "academics" in the first year is disappointing and de-motivating.

Even more serious is the fact that some students see the focus on conceptual learning as a disparagement of pragmatic competencies, hence, whatever non-academic skills they have developed seem to have been taken away. The experience of moving from paid, responsible positions in the "real world" to the role of "student" is experienced as infantalizing. They feel forced back into a more childlike, one-down role. Thus, for certain students, the first few months of the program is, phenomenologically, a move away from, rather than toward, professional competence and recognition.

In a sense, the logic of the model, stressing the development of a knowledge base first, is incongruent with a prominent psycho-logic (the expectation of field work and the need to be treated as a mature member of the profession) in certain students. This seems to be less of a problem for those who come directly from other academic programs -- they don't experience the student role as regressive though perhaps as restraining them from moving into the profession, and hence, deflating their expectations. Nor is it such a problem for those who have been in the field for a long time and have a secure sense of professional identify. Even if the latter have some anxieties about highly demanding intellectual work, they are ready to lay aside action in field settings in favor of gaining a better conceptual grasp of what they have been doing. Moreover, these more mature professionals are probably treated more as colleagues, even when in the student role, so they feel less one-down. The incongruence mentioned above is sharpest for those in the middle i.e., those who have been out of school for a while but are not yet "established" as professionals. It is this group which is most disturbed by the "academic" press of the first year curriculum and by the delay in getting into field practice.

All three groups need the conceptual grounding; consequently the new structure will be maintained. The problem of violated expectations can be handled with better communications in the recruiting process about the sequential structure of the program. The regression issue -- the problem of feeling less adult in the student role -- is less easily resolved.

On Learning the Craft of Professional Work

The first group of students in the new curriculum are now entering their second year, and hence, are just beginning to take on the major task of stage 2, i.e., learning and practicing the fundamental skills involved in the three competency areas. For several years, we have offered courses on research, small group training, and system intervention methods, varying in the extent to which they emphasize and make opportunities available for practicing the fundamental competencies involved. The project has enabled a reexamination of what has been done in these courses, how they fit into the curriculum, and how they can best contribute to competency development. We have also been experimenting with other modes of learning and styles of course management. Consequently, these courses have been redesigned as practicum-seminars directed toward learning the craft, with very encouraging results.

According to our analysis, there are three major learning requisites to be dealt with in a practicum design:

1. Rationalizing and modelling critical skills,
2. Creating manageable experiences in exercising those skills, and
3. Providing authentic feedback re. performance.

Appendixes A-C describe how these are managed in each of the competency areas. At this point, let us deal with them more generically in order to reflect on the problems involved and to guage their current effectiveness.

Rationalizing and modelling the craft. Even in relatively simple crafts (e.g., plumbing, woodworking) it is important to understand the tools and methods of their use -- to have a conception or explanatory model of what one does and why. This is all the more important when undertaking highly complex work, e.g., field research or developmental social interventions. One needs to identify the objectives of intervention and the methods and skills that are apt to be required, the instruments which may be useful, and the like. But one also needs to know what situations call for particular skills or methods, under what conditions will they produce what effects, how do they, in fact, produce any effects at all. In short, there is analytic task involved in learning methodology.

Our project work has helped us to articulate conceptual frameworks of practice and clarify the causal assumptions involved in methodology. The seminar side of the practicum-seminars is now well designed to help students explore and reflect on these frameworks and assumptions.

One also learns a craft by seeing it performed, by watching skilled practitioners as they demonstrate their work -- as an apprentice learns "at the elbow" of a mastercraftsman. So too in the Applied Behavioral Sciences, newcomers to the field need to observe professionals in action and talk with them about their work. The greater the number of role models the better, in a field as diverse and as rapidly evolving as ours.

In the OD practicum various practicing professionals are invited to demonstrate their approaches and discuss their own personal orientations to practice. Nevertheless, we think our students are exposed to too few alternate role models in all three competency areas.

Creating manageable experiences in role. As important as learning the theory behind the methodology is, it is not enough. Historically, methodology courses here and in the social sciences generally have often been ineffectual, not because of inadequate articulation of the conceptual structures which underlie the methods, but because they so easily fall into what might be called the "aboutism" trap. Students have been engaged in reading, lectures, and discussions about research methods, clinical practice, training or what have you. They have often been stuck in preparing for doing, and don't get down to the doing. Fish are not caught by going fishing, but by fishing. To learn the craft, one has to get his/her hands dirty in doing it.

All three of the practicum-seminars are now designed around opportunities for students to try out methods of inquiry and intervention first hand. In Research Methods, they design and conduct research projects, creating or adapting instruments, interviewing, observing analyzing and data. If there is a limitation in the research practicum, it lies in having inadequate experience in large scale, programatic research. The independent research projects (conducted by one or two students) must, of course, be limited in scale.

In the micro-system practicum students not only participate in several face-to-face interaction experiences, but they also design and co-train in an undergraduate group process laboratory. What is done in this course is highly effective, according to student responses. We would like to be able to follow-up this experience with opportunities to lead groups drawn from other populations and designed for a wider range of objectives. In both the research and small group areas students go well beyond trying out methods; in these contexts they become researcher and group leader, respectively.

In the teaching of skills in OD and larger systems interventions, we have come to grips with the aboutism issue through two mechanisms. First, we have designed short term intensive workshops to practice particular skills -- e.g., team-building, process observation, diagnosis, problem-solving. Of much greater significance, we have organized the class as a consulting firm in which student teams undertake extensive OD projects with organizational clients in industry, health, or human services. These teams plan and manage the entire sequence of gaining entry, negotiating a working contract, diagnosing relevant organizational dynamics and problems, intervening toward resolution or development, evaluating results, and terminating the relationship. Practicum projects continue for 6-7 of the 9 month course. In preparing for the projects, participants drop the student role and come to grips with what it means to be an active professional, accountable to one's clients and colleagues. They face up to the need to become an effective working team and to accept responsibility for the consequences of their work.

The formation of the class as a consulting partnership is a significant departure from past courses. The work is real, rather than simulated -- the experiences in role have intensity to match. The major limitation is that even with 6-7 months devoted to the projects, we will be unable to follow the course of change long enough.

Generating feedback on performance. The third requisite for learning the craft is the availability of feedback about the impact of one's performance. In addition to trying out the methods and skills in vivo, one needs to reflect critically on the consequences produced. The term "feedback" on performance has two usages which must be distinguished in order to understand its importance for learning. In common talk, feedback refers to an appraisal of the performance, a judgment made by an observer of effectiveness. Given the right conditions of trust and respect, the expression of such evaluations can be helpful to the learner in two regards: first, it contributes to motivation by reinforcing good work or spurring one on to greater efforts when the work is inadequate, and second, it helps the learner develop standards of performance. Evaluative feedback can also be threatening and alienating and it can increase the learner's dependency on the expert.

The second meaning of 'feedback on performance' is more technical and contributes to learning more directly. It refers to direct observation of the consequences of one's act, and we call it authentic (in contrast to evaluative) feedback. The rifleman in target practice looks at the 'hits' on the target. The carpenter examines the joint he has just glued or the finish he has sanded. The runner clocks his time on the mile. In each of these, the issue is to get valid data about the effects one has produced. If one intervenes in a group process to improve the climate, the relevant feedback has to do with observable changes in the climate, including verbal reports from group members about how they experience the climate.

Feedback in this technical sense is essential to the improvement of pragmatic skills. If one cannot detect the outcomes and match them against his objectives, he doesn't even know if he has finished the task, if he needs to do something else or do it in some different way, or if he needs to improve his performance. Reflecting on authentic feedback stimulates a search for alternative responses which might be more on target; when these are subsequently tried, the next authentic feedback reinforces improvement and extinguishes error. (Appendix E treats these issues in more detail.)

In the practicum setting, we attend to the things the student can do to generate and analyze authentic feedback, and we create opportunities to reflect on and discuss the results. For example, co-trainers in a lab meet after each session to discuss one another's interventions, to look at what occured in consequence, and to consider what else might have been more effective or might still be done to produce the desired outcome. Similarly, consulting teams try to measure the effects of an OD intervention and discuss the outcomes in terms of adequacy in meeting the objectives, leading to a more detailed planning of next steps.

The designs for the practicum-seminars deal with all three of these learning requisites well. As is fitting to the competencies to be acquired, a wide range of learning modalities are used. The elements have been tested in other courses and training programs. A full evaluation of the second year program will be conducted at the end of the year.

Practice in the Field

The second year practicum-seminars take the students into field settings and start them on professional work. But as with any skill, it gains finesse with repeated practice. More enduring and penetrating immersions into professional practice are also generated for many students, beginning with a summer long organizational internship. The discussion here is addressed to the conditions under which internship and field experience are fruitful (or not) for learning and the problems we face in arranging and managing these experiences.

Students gain most in internships which: a) includes a role which has currency in the organization as well as for the student (usually involving some recognizable link to the Applied Behavioral Sciences), b) challenges the student's ability to sort out what's gong on and come up with relevant action steps, c) has a basically supportive climate so the student can manage his/her emotional life without becoming isolated or overly dependent, and d) includes someone in the field who can serve as a colleague for sharing problems and critiquing plans and interventions.

When these conditions prevail, students return to campus with greatly increased self-confidence, more clarity of purpose and more energy. It is often a major turning point from reactivity to proactivity in learning.

Our major problem lies in the difficulty of making good internships and field projects available to everyone, and fitting the opportunity to the particular learning needs and readiness of the student. Occasionally, students get in over their heads in an internship and they don't make good use of it. More often the opportunity is too constraining or lacking in other necessary ingredients for it to be a major growth experience. Some years we are unable to find relevant internships for every student who wants one. Over the last three or four years, about a third of the students have had truly stretching internships, but a quarter have either had no internship or experiences involving little learning and growth. Some of the latter will gain more positive experiences, but later in their life in the program.

Experience in departmental R&D projects often has comparable effects. The sense of "coming into one's own" is enhanced by carrying significant responsibility in a context for autonomous problem-solving and decision making. Technical learnings tend to be highest in extended field projects coordinated by the department, due to the collaborative planning and evaluation and to the high investment in critiquing our experiences and learning from them.

Here again, the problem is in generating enough practice opportunities to meet student interests. With limited numbers of departmental OD or field research projects, those who demonstrate the most promise tend to be employed most. Consequently, a few students develop to very high level of competence and some get little access to developmental field experiences. An increasing number of students compensate for the scarce opportunities by generating their own consulting relationships, but many of these are largely unsupervised and lack the supports for feedback, reflection and review of learnings.

Opportunities for continued practice in micro system competencies are also available from time to time. More experienced students serve as training staff members in workshops for client groups, or students groups at the Master's or undergraduate level. Here again, opportunities are limited in number and variety. We are now initiating a new series of training laboratories and workshops for wider populations, which will fulfill more of this need.

In summary, some of the most profound learnings for students in the program are drawn from extended professional work in internships and field projects. We have learned a good deal about how to plan for them and how to derive optimal learning from them. We are not yet satisfied with our ability to make these opportunities available to all.

Confirmation, Integration, and Creative Contributions

Stage 4 in the developmental model is still largely untested. We have introduced a new integrative seminar for advanced students which we think will help them pull together the wide variety of learnings they have gained from the many contexts created for them.

Students are only beginning to gather material for and build competency portfolios. At best, they are more than a year away from final assessments and qualifying review. Hence, we have no track record to report on for this very important part of the program. We believe we know how to do this in ways that both hold to high standards of competence and are confirming and integrating for the student, enhancing his/her commitment to continuing learning and development.

With regard to stage 5 in the model, we continue to stress the importance of creative contributions through relevant experimentation, research and writing, and at present there are no plans for significant changes in our approach to or management of the dissertation process.

On the Support of Personal Adaptation and the Development of Core Strengths

In many parts of the curriculum there are significant opportunities for and attention to personal growth. In addition, we have also generated special structures and processes to address these needs. This preliminary program evaluation should look into these as well, although this is probably the stickiest area to evaluate.

Intensive Experiential Workshops

From time to time we take students off campus for intensive workshops, extending over periods from two days to a week. They are aimed toward personal development, problem solving, experimentation with special issues or techniques and the like. Nine workshops have been conducted over the last two years addressed to life/career planning, values clarification, group development, problem diagnosis, and interpersonal competence. Six laboratories and workshops are planned for this year alone. Some of the shorter workshops promise more than they deliver, and occasional students find them more tension producing than illuminating. Nevertheless, we have developed a highly refined expertise in the design and implementation of special purpose workshops for addressing students' needs and potentials for growth. On the whole, these workshops are very important contributions to personal adaptation at certain critical points in one's graduate career, and they add significant stimulation, direction and encouragement to the development of all four core strengths.

Relationships and Groups for Personal Development

Departmental workshops reflect one of the contexts for exploration and confrontation of self. We have also experimented with a variety of on-going unstructured development groups, with mixed success. Most successful have been those: a) which have included faculty members who are highly competent in group and interpersonal work and are also committed to facilitating learning in this mode; b) which have been composed of students of various ages and years in the program; c) which have been relatively free of serious or enduring conflict or stress.

Nearly all of the groups have been constructive in helping members adapt to life in the program and in building some supportive, sustaining relationships, even if they disbanded after the first few weeks or months. This year we are not composing formal development groups, in favor of supporting a more spontaneous creation of interpersonal networks.

The evidence tends to show that those students who build a network of supportive relationships and who work closely with a mentor fair better in the program than those who are more isolated. They work more (and more effectively) on their own growth, take more risks in the pursuit of stretching experiences, and work more at finding meaning and learning in those experiences. They both give and gain more from the program, and also tend to move through the program faster.

Problems in Adaptation and Development of Core Strengths

Much has been said above relating to the personal problems students experience in the program, e.g., the learning-performance dilemma, fear of failure and the survival mentality in the first year. Seashore recently published a very insightful article entitled "In Grave Danger of Growing,"*pointing to many sources of personal and family stress in professional development programs that place special emphasis on personal growth. A great deal of what he has to say pertains to our program as well. Paradoxically, a formal encouragement of and structuring for personal growth is often experienced as something like a "forced march." Healthy people resist "growing on demand." We can create the opportunity and the supportive climate, but the urge to grow must come from within.

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*Social Change:Ideas & Applications, NTL, Vol 5(4), 1975.

Not every student makes effective use of all the learning contexts available in the program. As would be expected, each student will gain more in some areas than others. Students differ in their readiness to plunge into the field, in their needs for structure around learning experiences, in their dependency on guidelines from others, and in their courage to face up to performance assessments.

The CBL project has aimed toward greater flexibility in the pursuit of competence, but in some areas it has produced a tighter, more demanding structure. We do many things, most of which are generally successful, to support the self-actualization of students in a context of developing creative professional competencies. But we also still have much to learn.

IV. PHASE TWO: AN EXPERIMENTAL MASTER'S DEGREE PROGRAM IN ORGANIZATION DEVELOPMENT

The MSOD Program arose out of a recognition of an increasing need within organizations for O.D. specialists--i.e., action oriented, knowledgeable and highly competent internal change agents. This need had been expressed by key executives as well as by staff members who might themselves be candidates for the program. Their interest was not in academic, scholarly knowledge; their concern was for enlightened pragmatic competence--and this matched our concerns in the project. Consequently, the program was conceived, designed and developed on a competency based learning model.

Objectives and Design

The MSOD Program attempts to provide an intensive learning experience in the theory and technology of O.D. It combines a core curriculum in the applied behavioral sciences with a variety of experiential learning events and field projects. The learning goals are defined according to the principles of a competency based approach to education; in other words, learning goals are translated directly from what practitioners in the field of O.D. should be able to do. The various learning activities are geared and designed to the attainment of those goals.

The program focuses on the development of diagnostic, intervention and interpersonal competencies as they are used for problem solving in relationships, team building, conflict management and the like or for total organizational renewal and development. Diagnostic competencies refer to the ability to gather, organize, analyze and use relevant information from organizational settings for understanding the sources of problems and potentials for development. Knowledge of current theories of organizations, small groups, personality, general systems and social change, as well as practical skills of interviewing, assessing documents, observation, etc. are required, as are conceptual and analytic skills for utilization of the diagnostic information in generating effective change plans. Intervention competencies rest on an understanding of an organization's objectives within the context of its environment and a grasp of the basic O.D. cycle (diagnosis, action, evaluation). Intervention techniques include team building, conflict resolution, group training, third party consultation, organizational design, survey design and feedback, problem solving and strategy formulation. Interpersonal competence refers to the capability to use oneself as an effective tool for intervening in human interaction. It requires knowledge of personality dynamics and interpersonal relations combined with skills entailed in the dimensions of the helping relationships, e.g., empathic listening, supporting, confronting issues, counseling, etc.

It is important to note that the above distinction of the three major competencies and the topics included in each is done only for analytic purposes. The reality of O.D. interventions manifests a complex intertwining of the three in the various phases of the generation of change. This fact was also reflected in the curriculum of MSOD--while at different points in time one competency might be at the forefront, the interrelatedness of this competency to the others was underscored.

The educational approach to the development of the three competencies includes a wide variety of learning modes--exposure to theories (lectures and readings), experiential learning, practical applications to real life problems, discussion of cases and field projects in the students' home organizations. Activities are carried out in the total class, in small groups, trios and dyads, and on an individual basis. A variety of support groups are extensively utilized for work as well as for learning.

The program is divided into three phases with intensive 4-6 day workshops between phases. The division to three phases reflects a thematic division--the first phase focuses on micro-systems, the second on macro-systems, and the third on the actual carrying out of a change project in the student's home organization. The intensive workshops between phases are designed to consolidate learnings from the previous phase, to assess the degree of progress, and to prepare for the next steps. During the first two phases, day long meetings are held once a week, alternating Thursdays and Saturdays; during the third--once every other week. Spending a full day together, rather than meeting a few times a week for two-three fractionated classes, provides more room for intensive learning, for more significant experiencing and for building a cohesive learning community.

Implementation and Experience in the Program

After a period of intensive planning, development and selective recruiting, the program was launched in September, 1975. The initial group of 26 students are now well into the third phase of the program--their in-company change projects are well underway, but not near completion. The program will finish in January, 1977.

All students in the program are fully employed as middle or upper level managers in line and staff positions in business, health care and community organizations. They occupy positions which provide them with opportunities to practice various aspects of O.D. activities on the job. The admission criteria included academic achievement, energy and potential, as well as an expression of genuine interest in learning how to bring about change. A special effort was made to create a heterogeneous mix of organizations, backgrounds and experiences. There are nine women and 17 men in the program, ranging in age from 27 to 53. The following is a description of the experience to date.

Opening Workshop: Building a Learning Community

Students and faculty met as a group for the first time in a week-long workshop at Punderson State Park and engaged in a variety of activities designed to build a viable learning community for the months ahead. Three family groups were formed on the basis of mutual choice, and met separately for daily small group sessions. The workshop activities shifted between small groups and the whole group, so that the community would be able to function in various modes of learning.

The workshop provided an opportunity for students to become oriented to the purposes and style of the program and to explore their aspirations for attaining and using O.D. competencies. They also shared their concerns about the program with the faculty and each other. The climate and process of the workshop created a great deal of energy, excitement and enthusiastic anticipation for the months ahead.

Phase I: Towards Understanding and Competence in Micro-System Analysis

The first phase (October 1975 to January 1976) focused on issues of personality, interpersonal relationships and groups, and on the development of interpersonal skills, using an emergent systems approach. Practice in conceptualizing group behavior, process consultation and facilitation of interaction, communication processes, career planning and personality assessment matched the conceptual inputs during this period.

The first phase was brought to a conclusion in a week-long workshop held away from campus. Activities were mostly conducted in small groups, with community meetings in the evenings. For most members, this was a first exposure to intensive sensitivity training, and it complemented much of the interpersonal and group work done in class during the fall.

Phase II: Towards Competence in Macro-Systems Analysis, Diagnosis and Intervention

The second phase, February to June, 1976, focused on organizational dynamics and development, on organizational design and strategy, and on planning and intervention techniques. Students became acquainted with the relevant concepts and experienced their implications through the readings, lectures, discussions, participation in various simulations, case analysis and supervised field work.

The topics included organizational ideologies, strategies, structure and operating mechanisms, differentiation and integration for organizational design, intergroup conflict, the O.D. cycle and open systems planning, action research, management of social change, organizational diagnosis, interviewing skills, survey feedback and questionnaire construction, and the socio-technical systems approach to O.D.

Workshop on the Transition from Preparation to Action

Again the group moved off campus for four days to review and consolidate their learnings from Phases I and II and to organize for Phase III. Project support teams (three-four students with consulting help from faculty and doctoral students) were formed to plan and prepare for development and change projects each student would implement within his/her own organization in the ensuing months. Students and faculty also joined together in planning the bi-weekly program sessions for Phase III.

Phase III: Field Experience in Strategic O.D. Intervention

Educational activities in the first two phases are intended to prepare the student to undertake significant O.D. work in their own organizations. This final phase is built around an intensive O.D. experiment in the field. Each student designs, negotiates, conducts and evaluates an integrated sequence of interventions aimed toward the improvement of a subsystem within his/her company or agency. These projects require a data-based diagnosis, a planned series of interventions based on the diagnosis, observation and evaluation of consequences, and planning of future interventions where needed. The project ends with a written report covering the work done and discussing possible contributions of the project to the field of O.D. At the time of this writing, 19 of the projects are well into or beyond the diagnostic stage, plans for intervention and evaluation are clear, and materials for some parts of the report are in hand. Projects for five students are still in the preliminary stages of planning, design and negotiation. One student, who has moved to a new corporation, has yet to define a project.

Students meet in continuing small groups--"project support teams"--to help each other in planning and critiquing project work. The class as a whole meets bi-weekly for further discussion of O.D. techniques and the various problems of managing O.D. projects in real life situations. So far, topics have included diagnosing and intervening in intergroup conflicts, techniques for team building, managing the long-term survival of an O.D. function in organizations, shifting roles from a technical specialist or line manager to an in-house O.D. practitioner.

Final Workshop: Confirmation and Integration of Competencies

The program ends formally in a four-day off campus workshop designed with three objectives in mind: (1) A final assessment of each candidate's competencies based on data drawn from a review of experiences and outcomes of the field projects; (2) agenda setting for future career development; and (3) an evaluation of the MSOD program, its structures and learning processes.

Assessment: Changing Functions and Processes

Assessment plays an integral role within the competency-based approach to learning. In addition to providing information that corresponds to formal and public accrediting criteria, it is conceived as an important tool that serves the needs of the students for realistic recognition of their skills and their state of development at a certain point in time. Such recognition is the basis upon which one plans learning activities geared to the attainment of specific competence goals.

The participative learning process involves continuous feedback on day-to-day performance; in this light, learning and assessment are continuous interdependent elements in a continuing organic process. In addition, four milestone assessment events are designed into the program, beginning with the initial workshop and following each of the three major phases of the curriculum. Each event was addressed to a special need or function and the procedures involved were designed for those purposes. We concluded that a periodical application of one and the same assessment device would be neither reliable nor adequate to the changing functions of assessment.

Assessment I: Preparing for Student Centered Learning

Recognizing that students enter the program with many relevant past experiences and achievements, the first need was to "tune in" to each student in ways that capitalized on prior personal history and that would stimulate further development.

At the opening of the program assessment had three functions: (1) to acquaint faculty and colleagues with the individual's past experience and to highlight his/her present level of expertise; (2) to identify and clarify individual learning needs and potentials; and (3) to increase motivation and commitment to the attainment of new competencies. Substantial time in the opening workshop was spent in triads and larger subgroups, sharing past experiences, discussing expectations for the program, and getting to know one another in the present. Late in the week a session was devoted to a systematic procedure for sharing initial perceptions of each other and building a picture of one another's strengths for work in the field. Then following a presentation on our philosophy and strategy of competency oriented education, a session focused on exploration and elaboration of professional aspirations for the future. Open discussion of these issues raised commitment to the pursuit of competence. Sharing with faculty their sense of current strengths and future aspirations provided a data base for more detailed planning of Phase I learning experiences.

Assessment II: Self Assessment of Personal Style

Toward the end of Phase I, the students were graded by faculty in terms of comprehension and demonstrated competence (in classroom exercises and discussions) and for working with micro-level systems. Students also provided feedback to each other about strengths and weaknesses in their interpersonal and small group behavior.

The particular assessment function required at this point, however, was one which would help the student reflect on and integrate his personal style as leader, facilitator, and problem-solver in face-to-face groups and relationships. A procedure for comprehensive self-assessment was designed to increase each individual's awareness of personal needs, values, skills, and assumptions as they relate to interpersonal engagement in O.D. work. Using a battery of projective tests and paper-and-pencil inventories of needs and values, a written autobiography, and the feedback from faculty and peers, each student wrote an extensive self-assessment paper portraying his/her personal style in working with and helping other persons and groups. The materials upon which these papers were based were shared with faculty and other students, leading to in-depth discussions, mutual help in interpretation, and often new insights into one's background and style.

This task was difficult and tension arousing for most students, but ultimately highly confirming of them as persons who are in the process of development and who have much to offer others.

Assessment III: Consolidation of Learning for Field Application

By the completion of the second phase in the program a great many things had been learned about the dynamics of groups and organizations and about strategies and tactics for improving them. The primary functions of assessment at this point were: (1) to consolidate these learnings as a foundation for approaching the in-company change projects; (2) to confirm the person's readiness to begin project planning and development; and (3) to identify and address his/her needs for help, support and encouragement in beginning field work.

The June workshop provided structure and opportunity to review performance over the initial nine months of the program, to generate feedback from other students and faculty on levels of competence attained so far, and to share hopes and concerns about moving into the individual projects. Assessment methods were both structured by faculty and initiated by students in small groups according to these needs. The project support teams were organized in response to the third assessment function identified above.

Assessment IV: Confirmation of Professional Competencies

In the final workshop to be held in January, 1977, the key functions of assessment are: (1) to provide confirmation of one's emerging professional identity; (2) to offer recognition of one's degree of effectiveness in field work; and (3) to generate further self-direction for further development.

The primary data-base for this final assessment is to be drawn from the experiences in and outcomes of the field projects (including feedback from clients in the home organization). Data for project evaluation are being gathered and analyzed in the context of the project. They are to be systematically reviewed and translated into a description of demonstrated competence in the final workshop. Based on these (and prior) assessments, students will sketch out action plans for future developmental experiences and for evaluating these experiences when they occur. Hopefully, this will provide students with an orientation to continuous self-assessment and will stimulate them toward carrying it on later in their professional careers.

Evaluating the MSOD Program

The importance of evaluation for an experimental program such as the MSOD cannot be overemphasized. The question whether this innovative educational approach makes a difference in the future careers of graduates must be vigorously addressed. But since the program is still midstream at the time this report is being written, we are still more than a year away from such an evaluation.

However, some program evaluation processes are taking place as the program proceeds. Rather than waiting until the end of the program, the staff maintains a continual tracking of how students are developing, and whether objectives are being attained. They continually critique activities, sessions and assignments, generating feedback to the faculty and making necessary changes along the way. A number of times the staff has made explicit changes as a direct result of receiving feedback from students, e.g., when it was realized that there was a discrepancy between staff's perceptions and where students felt they were at the moment.

Many indicators are available now which point to the potency and effectiveness of the program. Some give evidence of unusually high student commitment and satisfaction. For example, attendance averaged above 95 per cent and never dropped below 90 per cent during the regular school year, and stayed above 80 per cent for each session during the summer when students were juggling vacations from their jobs. In the three intensive workshops, attendance was always 100 per cent. The attrition rate is also exemplary--only one student has dropped from the program during the first 13 months, and he because of a reorganization in his company. Other students have been transferred to Pittsburgh, Detroit, and Washington, and have continued in the program, commuting to all sessions.

Every student has indicated that, if they had the decision to make over again, they would pursue the program without question. Virtually all of them have recommended the program to one or more colleagues in their home organizations. This is not to say that they find no weaknesses in the program. During critique sessions, they are by no means at a loss to identify things in the program they are unhappy with. Nonetheless, they are enthusiastic salesmen of it.

As another measure of student commitment, we must include the unusually high energy with which students engage in a variety of demanding tasks, some of them (like the self-assessment paper) potentially quite threatening. They take the need for competence quite seriously and see most program activities relevant to reaching this goal. Moreover, they are quite ready to confront themselves and each other, even at the risk of some embarrassment. They invest many extra (non-required) hours to program work, in addition to devoting some 22 full Saturdays for formal sessions. This has become a very exciting program for all those involved--faculty and students alike--and this is obvious even to those who observe it from the periphery.

Beyond the question of satisfaction with the program, there is also evidence of significant increases in competence. Measurable increases in interpersonal skills are evident in nearly every student. Growth in analysis and planning skills are demonstrated in comparisons of written work from early to late in the program. Perhaps most telling is the fact that after just one year in the program, three quarters of them have been able to design and launch significant projects in their own systems. We believe the remaining quarter will have done so in another month.

Students in the program are now functioning across some range of competence, as would be expected. Some (perhaps four or five) will probably never reach a level higher than one might find in any group of capable enlightened managers. One or two will be less effective than this. According to current faculty assessment, the rest show promise of becoming, over the coming months, very capable internal consultants, planners and change agents. Six of them are now fully operating at a level of professional action competence we seek in our doctoral students.

Even though faculty observations of performance and review of work produced to date indicate a remarkable development on the part of most students, this needs to be tracked further into the future and must be more solidly validated. We are planning a systematic follow-up study from the point of view of four relevant constituencies: the students themselves, their clients in their home organizations, executives in those organizations who are in a position to observe and evaluate the effects of their interventions on the total system, and the faculty. The major questions to be addressed are:

1. What competencies has each graduate gained from the program and to what level of expertise?
2. To what extent, and in what ways, have graduates been able to use these competencies in their post-graduate careers?
3. What impact has this had on their home organizations?

This will be a longitudinal study building from the data generated during the program and including new data to be collected at the conclusion of the program and again one year later.

V. PHASE THREE: GENERALIZATION AND DISSEMINATION TO OTHER PROGRAMS AND INSTITUTIONS

The major work of the CBL Project has been aimed toward innovation and improvement in the Master's and Ph.D. Programs of the Department of Organizational Behavior. These efforts were tailored to our particular circumstance and readjusted over the last two years to the realities and requirements of the local scene. The direct beneficiaries of Phases I and II are the participants (students and faculty) of those programs, and ultimately, one hopes, the client systems and future students served by the increased competence of those educated in these programs.

From the beginning, these programs were conceived as pilot projects from which one might learn a good deal about the nature of professional competence, about strategies of competence development in graduate programs, and about processes of programmatic educational innovation. We also saw a more extended audience for our learnings than just ourselves and our own students.

The objectives of Phase III (which was originally to have started in July, 1976, but in fact began a year and a half earlier) have been:

1. To generalize from our experiences with and evaluations of the competency based learning programs developed in Phases I and II;
2. To disseminate our learnings and innovations regarding this approach to other educators and institutions; and
3. To influence the process and criteria of assessment and certification in relevant professional associations and institutions.

Project activities and products (articles, conferences, workshops, presentations, and consultations) relevant to these objectives are described in the sections which follow.

Contributions to Theory and Strategy in Competency Oriented Education

Investigation, analysis, and conceptualization have been central activities throughout the life of the project and have formed the foundation for experimentation and innovation. These same processes are involved in our efforts to generalize our learnings and make them available to other educators, programs, and professional colleagues. Many of the papers by project staff (e.g., Appendices A-D) were prepared for internal purposes. The following articles are addressed to wider audiences and have been or are slated for publication or public distribution:

Bigelow, John. Learning: A Holistic View and Its Application. Pre-publication draft, 1975.

Friedlander, Frank. O.D. Reaches Adolescence: An Exploration of Its Underlying Values. Journal of Applied Behavioral Science, 11(1), 1976.

Friedlander, Frank. Purpose and Values in O.D.: Toward Personal Theory and Practice. A project of the O.D. Division of the American Society for Training and Development, 1976.

Kaplan, Robert E. Maintaining Relationships Openly: Case Study of "Total Openness" in a Communal Organization. Human Relations (under editorial review), 1976.

Kaplan, Robert E. Some Hidden Elements of Control in Group Facilitation: Appreciating the Bounded and Binding Aspects of Openness. (Under editorial review), 1976.

Manring, Susan. Exploration of a Value Basis and the Ethical Conduct of the Science of Social Intervention. Pre-publication draft, 1976.

Obert, Steven. Resolution of Trainer Countertransference in T-Groups: A Case Study in the Development of Competence. Pre-publication draft, 1976.

Wolfe, Donald M. On Competency Based Learning in Organizational Behavior. Prepared for distribution at a conference on the improvement of teaching in organizational behavior--Dallas, Texas, April, 1975.

Wolfe, Donald M. Toward Competence in Research and in the Management of Change. Prepared for distribution at the American Political Science Association Annual Convention--San Francisco, September, 1975.

Wolfe, Donald M., and A. Pazy. A Developmental Approach to the Assessment of Professional Competence. Pre-publication draft, 1976.

Generalization from project experiences will continue for the next several months, aimed toward publication. In addition to those listed above, four papers are in various stages of preparation: (1) a further elaboration and clarification of our model of professional development, underscoring central learning processes and their implications for the design and management of educative experiences; (2) an article, based on our analysis of self-descriptive statements on values and ethics in practice by a broad sample of Applied Behavioral Scientists; (3) a paper on configurations of competencies involved in planning and managing system change interventions; and (4) a treatment of problems in educational innovation, with special attention to dilemmas, polarizations, and integrations in the implementation process.

The various conceptualizations we have been working on are of interest to somewhat different reference groups. Yet, as a group, they reflect a common philosophy and orientation. We have some reasons to believe these contributions may be cumulative; consequently we are currently reality-testing the potential of developing a sub-set of them into a monograph.

Dissemination of Competency Based Learning Strategies to Other Programs and Associations

Publications represent only one of many ways of making our innovations and experiences available to others--probably not the best way, at that. The project staff has also been active in other forms of communication and engagement with programs and colleagues elsewhere. These fall into three categories: (1) Presentations to professional societies, (2) working conferences on professional competencies or on educational innovation, and (3) implementation workshops and consultations.

Presentations to Professional Societies and Associations

Several members of the project staff have made presentations to professional societies related to one or another thrust of the project--e.g., on the theory and method of competency-based education, on the structure of our particular programs, or on conceptions of one or more of the focal competencies. We have tried to reach groups of practicing professionals as well as educators.

The Academy of Management. This is an association whose primary membership consists of faculty from schools of management or business administration or from non-university based management development programs. Professor Friedlander serves as chairman of the Organizational Development Division and Professor Wolfe is a member of the O.D. Pedagogy Committee, a group committed to improving the content and educational methods of teaching O.D. skills. Four of our staff members have presented papers in the Academy's 1975 or 1976 annual conventions, including one on the MSOD program as a significant departure in program structure and learning process.

International Association of Applied Social Scientists. The major accreditation organization for professionals working with O.D., group training, and related consultative approaches to social change, IAASS has a membership of several hundred of the top professionals in the field, many of whom also teach at major universities. As will be described in a later section below, they have been a major target of our efforts to link competency based education with certification of professional competence for practitioners. No total membership conventions are held, but regional meetings are convened, usually in conjunction with the peer review accreditation process. Presentations of our approach to competency-based learning and assessment have been made to both the midwest and southern regional assemblies, to the national executive group (President, Board Chairman, and staff), and to the Committee on Standards and Admissions.

The Organizational Development Network. The O.D. Network is an association of O.D. consultants, internal O.D. practitioners, and academic leaders in the field of organizational development and change. Widely attended semi-annual conventions are held to share new developments in theory, strategy, intervention methods, and to hold skill development sessions relevant to change interventions. Presentations of CBL materials and approaches have been made by project staff members at three of the last four meetings.

American Society for Training and Development. Three of our staff members have made presentations on O.D. competence or educational strategy related to CBL at national or regional meetings over the last year. Membership of ASTD includes organizational training directors, training consultants, and academicians.

American Political Science Association. At the 1975 Annual Convention in San Francisco, Russell Edgerton of the Fund staff chaired a symposium on the Purpose of Political Science Education. Professor Wolfe served on the panel and presented a paper (Toward Competence in Research and the Management of Change) proposing new goals of graduate education in Political Science and changes in program structure and process to address those goals.

American Psychological Association. At each of the last two APA Conventions, project staff members have made presentations on aspects of system intervention and competence in professional practice.

About half of these presentations dealt with issues of effectiveness in professional practice, with relevant competencies, strategies of intervention, and the like. The others all dealt with education for competence, either specifically on our programs or on broader issues of educational purpose and strategy springing off from our project experience.

It is next to impossible to gauge the impact of presentations such as these. We view them as serving several purposes: stimulating new thoughts about educational goals, methods, and innovations; broadening academicians' and practitioners' perspectives on the nature of competence; even supporting our recruitment efforts. They probably are mostly a way of "sowing seeds"--providing information, stimulation, and rationale. While most of the feedback has been very encouraging and many people have sought additional information or follow-up, a great many of those "seeds" will never come to fruition. Without doubt, presentations such as these are worthwhile, but they should not be viewed as a highly effective method of influencing higher education or the professional field.

Working Conferences on Educational Innovation

A more potent approach to dissemination is to be found in the smaller, intensive three-five day working conference. In this context, there is not only a sharing of information and presentation of orienting frameworks, but an extended opportunity for give and take around competing philosophies and strategies and for problem solving in regard to adaptation and transference to other situations and institutional contexts. Members of the project staff have been central contributors to four working conferences over the last year and a half.

The Dallas Conference on the Improvement of Teaching in Organizational Behavior. In April, 1975, representatives from schools of management at more than 30 universities convened on the SMU campus to share perspectives, work on problems, and develop methods for more impactful teaching of organizational behavior. Prior to the conference, a paper was prepared on our approach to educating for competence, which was distributed to conference participants. In addition, we held a two-hour seminar on the CBL strategy which was followed, at the request of several participants, with further discussions of the problems involved and possibilities of use in their programs.

The Boston Conference on the Improvement of Teaching in Organizational Behavior. The success of the Dallas meetings led to a similar conference, this time hosted by Harvard, MIT, and the University of New Hampshire in April, 1976. Members of the project staff played central roles here, as well, presenting the design and experience of the MSOD Program and acting as convenors of small discussion groups.

The Benelux Conference on New Frontiers in Organizational Development. In November, 1975, we held a five-day conference in Cleveland which came to be known as the Benelux Conference. Participants included Ph.D. students and faculty from our department, a handful of practicing professionals in this area, and 22 Belgian and Dutch consultants and their faculty who were concluding a two-year post-graduate professional development program for O.D. practitioners in Europe.

The focus of the conference was on competencies in the professional consultant and structural supports for effective O.D. work, especially in other cultures and in other kinds of organizations (e.g., hospitals, political parties) where O.D. technologies had seldom been employed. The program included sessions on competing value systems in O.D., on assessment issues, on the development of consulting teams, and the like. It also provided a structure for a great deal of sharing of experiences across the two cultures and for comparing educational methods in the two programs.

The trip to the U.S.A., and this conference in particular, was to have been the final event in the Benelux program. Reports back from Europe after their return substantiate that it was, indeed, the culminating event but not the last. As a result in part of their experience here, they contracted to continue the program for a third year focused on field practice and pursuing further competencies. The impact on our own departmental group had similar, but perhaps not so powerful, lasting effects.

The Columbia Conference on Developing New Educational Programs in Health Services. In May, 1976, the School of Public Health at the University of South Carolina hosted a working conference of some 16 educational innovators from schools of medicine and public health. Two members of our project staff were invited to participate along with the Associate Dean of the CWRU School of Medicine. The conference addressed the need for new structures for learning, organizational issues in school-hospital relationships, utilization of other university and off-campus resources, and the like. While only a brief presentation of CBL as such was made, experiences in the project contributed to our serving as consultants vis a vis innovative efforts elsewhere.

These four conferences, while distinct in purpose and format from each other, were qualitatively quite different from the presentations discussed in the section above. In both cases there was opportunity to present information derived from the project, but in the conferences we were able to engage more fully in the problems and issues in the innovation process and to deal more directly with the issue of transference to other programs. We could address our attention to the realities of their context and work with them on possible adaptations. We believe this to be a more effective medium of dissemination. Although it reaches fewer people, it does so in greater depth.

Implementation Workshops and Consultations

Our third approach to dissemination (in addition to publication) focuses even more directly on the other programs, through providing training workshops and serving as consultants to their programs. In March, 1976, we conducted a workshop for the University of Florida and that state's Department of Education. The participants (staff members of those institutions) were redefining their roles to include serving as developmental consultants to school systems. The purpose of the workshop was to introduce them to competency based learning and to launch them on self-monitoring programs of learning. The workshop was quite successful in helping them identify relevant competencies, in developing support systems for self-directed learning, and in helping them begin to plan a sequence of learning experiences which might build competence. Other workshops have also been conducted with IAASS groups (see below).

The principle investigator has served as a consultant to the S.M.U. project on experiential learning, and to various others who are experimenting with teaching or program innovations. He is also a member of the Theory-Practice Curriculum Project Advisory Council at Medgar Evers College. For the most part we have held our consulting activities to a minimum, in favor of other direct work on our own programs and generalizing and conceptualizing from our experience. Nonetheless, we recognize the importance of providing consulting services to other innovation projects and see this as one of the more significant ways of extending the consequences of our project work.

On Improving the Certification Processes and Criteria in Credentialing Organizations

The movement toward competency-oriented professional education is aimed toward preparing people more effectively for entering a professional career. But the process of development certainly does not stop with the attainment of a degree, and the issues of competence take on full meaning in the context of one's career. We hope (and believe) we are developing students with a commitment to continued learning and an ability to fulfill that commitment--hence our heavy emphasis on "learning how to learn."

We have a sustaining interest in developing the profession (as well as the professional) and in the structures which mediate and support professional work.

Our inquiries into the nature of competence are as relevant to this as they are to education. Consequently, one of our project objectives has been to make our findings available to relevant professional associations and, where appropriate, influence their utilization in the certification of professionals. Our major attention in this regard has been directed to IAASS, the professional accreditation agency most relevant to the areas of competence addressed in this project. While small in comparison to those involved with other professions, experience in working with this system may be fruitful in terms of re-examination of competency-based certification processes in other, larger systems.

From its inception, IAASS has been committed to accreditation based on competence attained rather than on degrees awarded, publications, references and the like. Certification of professional competence is currently granted in four divisions:

1. Organizational Development Consultants
2. Community Development Consultants
3. Laboratory Educators (based on small group experiential methods)
4. Internal Organizational Development Practitioners

The organization is divided into eight geographical regions within the U.S. and Canada, plus an international group, mostly concentrated in Western Europe. The accreditation process is managed by Regional Peer Review Panels, each consisting of eight to ten certified professionals representing all four competency divisions.

The application process in the past has been unusually demanding, constraining and cumbersome, requiring the right kinds of input but next to impossible to pull together adequately. Certification decisions by the Peer Review Panels have been based on somewhat ambiguous criteria, differing in detail from one region to another. The spirit and intentions in this organization have been enlightened and creative, but the process and criteria need significant improvement.

Our department has always been represented on the Midwest Peer Review Panel, and shortly after the start of the CBL project, the principal investigator was elected to this body. Our experience in struggling with IAASS certification decisions has interacted richly with our project explorations of related competencies and their assessment. The combination of these experiences has led to a series of interventions into various parts of IAASS aimed toward strengthening criteria and improving the process.

Starting in late Spring, 1975, Dr. Wolfe has been a frequent consultant to the President, Board Chairman and the Board of Trustees on organizational and strategic issues and especially on contributions they can make to improving the accreditation process. In April, 1975, Dr. Wolfe was appointed to the Committee on Standards and Admissions, a national body charged with developing and overseeing the process and criteria of certification. Based in part on contributions from the CBL project, this group redesigned the application process so that it will more closely reflect the particular character of the applicant's practice, and so that he/she can more readily communicate and demonstrate his/her competencies in performance teams. With consulting help from Dr. Wolfe, two of the Peer Review Panels have adopted the new process to their review and decision task, and it is now being implemented in each of the other regions.

The Committee on Standards and Admissions is now turning its attentions to a systematic re-examination and refinement of criteria for assessment of competence in the four Divisions, again drawing on contributions from the CBL Project.

The Charter of IAASS requires re-accreditation of members every five years. While the certification standards must remain the same, a new and different review process is called for. Our project staff has designed a workshop format for engaging members in a review of their practice. The workshop is designed to serve three purposes: (1) to produce an evidentiary base regarding the demonstration of competence in practice, (2) to facilitate re-certification decisions by the Peer Review Panels, and (3) to provide reconfirmation of the members' professional identity.

Thus, we see the workshop as an opportunity for the member to experience a renewal in his/her career as well as a method for re-establishing public recognition of his/her credentials for professional work. The workshop has been conducted experimentally with one Peer Review Panel. The design (along with this first experience with it) has been presented to the Board of Trustees, and with their concurrence, is being prepared for adoption in all eight regions.

Our work with IAASS is not complete but it has already produced significant results: the development of new processes for preparing and making accrediting and re-accrediting decisions. The redefinition of competence criteria is just underway, so the final outcome is a matter of speculation, but this movement is also most encouraging.

The American Psychological Association is also re-examining its standards for professional work. Professor Friedlander has just been appointed to the Committee on Professional Standards representing the fields of Organizational and Consulting Psychology. This constitutes another arena in which the CBL Project may contribute to the governance of professional practice.

VI. Problems, Polarities, and Prospects in the Development of Competency Based Education

This report has focused on the theoretical framework for designing competency oriented learning programs, on the nature of the particular competencies of concern here, on the products of our innovative efforts (the Ph.D. and MSOD programs) and on our generalization and dissemination activities. We have treated only incidentally the processes involved in the work itself. Much of our work has been creative and fruitful, and it seemed most appropriate to dwell primarily on what has been created.

The innovation and change process itself has also been the subject of our inquiry. Because of our attention to planning the process as well as the outcomes, and because of our deep investment in finding effective methods of education, we have been able to pursue some rather ambitious undertakings and "pull them off" with what we now consider some substantial measure of success. However, inspite of all our plans, ambitions, and good intentions, the road has often been stormy, frustrating, and futile. We would be remiss in submitting this report without mentioning the problems encountered along the way.

Some of our problems are of local interest only, having to do with peculiarities of our context and history here at CWRU. But we have reason to believe that some of our difficulties and frustrations are more generic in character -- some variation of them is likely to arise at other institutions and with other innovators in the process of attempting to create competency oriented educational programs.

What will be said below about these issues is apt to be more tantalizing than illuminating. The problems are exceedingly complex and intractable and, while we have a general grasp of them -- indeed, even some deeper insight --

we are still living them and working to place them in full perspective. Others may have found solutions we have not yet imagined. Our intention is to continue our analysis of these issues and produce a more comprehensive conceptualization and publication of them in the coming months. For the present we must be content with merely flagging five issues as critical dilemmas in the development of competency based learning programs.

1. Rigidification vs. Personal Elaboration in a Rapidly Changing Field.

The field of Applied Behavioral Science is young and rapidly growing and changing -- according to Friedlander, it is just reaching adolescence. * Some of the defining characteristics of the field 15 years ago are now peripheral issues at best. In its short hectic history, the field has gone through several fads and is still struggling for a coherent sense of identity. In our efforts to conceptualize basic competencies in the field, we have been asking in part, "What do we want to be when we grow up?" That is to say, we recognize that we are educating professionals for a field which is not in a steady state and in which current practices are apt to change markedly in the coming years. The question then is not only, are we educating for today's competencies or tomorrow's? but also, In what ways will our conceptions of competence affect the future development of the field?

The dilemma we face in the initial conceptualizing task (i.e., identi-

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*Friedlander, Frank, O.D. Reaches Adolescence, Journal of Applied Behavioral Sciences, 11 (1) 1976.

fying and defining competencies can be expressed as follows: Shall competencies be defined in highly specific, detailed behavioral descriptions or in broad, general terms which convey the purpose, spirit, and generic capacities involved in professional work? We call this the delineation vs. generalization dilemma, and as with any significant dilemma, there are virtues and vices to be found on both horns.

In the delineation approach, the definitional task is clear, though very demanding. It calls for analyzing major competencies by breaking them down into basic specific elements, making finer and finer distinctions, and spelling out detailed criteria for pieces of performance. The virtue of this approach is in the concreteness of the output and in the potential ease of teaching and assessing the behavioral manifestations of competence.

The delineation approach also contains a trap, for two reasons. First, the task rapidly becomes overwhelming when dealing with such complex competencies as OD consulting or creative research. The task is endless, for with each layer unraveled, one discovers still further distinctions which must be clarified, more elements to be defined and classified, more situations to take into account. To catalog all the various elemental acts and insights would test the capacity of Sears, Roebuck, Montgomery Ward, and all the rest. In the extreme the competency is literally defined to bits. Even far from that extreme, the work becomes bogged, mechanistic and non-additive.

Second, one rapidly loses sight of the organic wholeness of effective competent professional work. It isn't the individual minute by minute acts that produce the effect, its their organization into significant gestalts. Even for relatively simple competencies, the person using them adapts his/her movements organismically, intuitively -- just as in walking we don't consciously tell each muscle how and when to contract in order to maintain our balance and make progress. If we did, we would lose our grace, and walk less competently.

The analytic fractionation of complex, organic processes moves one away from really understanding competence, because it distracts him/her from recognizing the organizing principles which make them effective units of action.

The virtue in the opposite pole, generalization, is in its maintenance of organic integrity, in its emphasis on essential qualities and factors (if these are in fact discovered and captured), and in the flexibility with which one can adapt one's own skills and style to the purposes underlying the competence. The danger in the generalization approach is that the competency, so defined, is apt to be too vague and abstract; systematic assessment is difficult, and the learner may become lost in non-operational intentions. In fact, the competency may not seem to be defined at all.

The delineation approach to the definition of competencies serves to codify the field and to consolidate standards of performance, a matter of considerable concern in a field as varied and ambiguous as this. But this involves a risk as well, when carried to an extreme. How do we distinguish between consolidation and calcification? To what extent does codification lead to rigidification? Won't we come to the conclusion that there is just one best way that a thing is to be done. And might this not destroy, or at least undermine, creativity and the evolution of still better methods?

The other end of the dilemma, generalized conceptions of competency, also has implications for the field more broadly. On the positive side, this approach enhances the freedom for each professional to elaborate and extend the generic competencies in ways that fit his/her needs, style, and circumstance best. It leaves room for new developments and creative divergence from common practice. The field stays new and fresh. But the question is, how do we distinguish flexibility and adaptability from ambiguity and lack of focus? Might the stress on openness of opportunity and the possibilities for creativity only be a cover for vagueness in articulating what we're up to or for sloppiness in work done? Will generalities in the definition of competence in fact become an invitation to incompetence?

This dilemma can be expressed, alternatively, as: Is the future of the field better served by consolidation and standardization or by a flexible orientation to competence which encourages future evolution and personal elaboration?

After considerable effort and exploration in both modes -- delineation and generalization -- our eventual approach to defining the competencies falls closer to the latter than the former. We are, of course, in favor of establishing clearer standards for professional competence, but found diminishing returns in trying to spell them out in great detail. The analytic process was carried to a point where it provided orientation to faculty and students, guidance in the development of learning and assessment structures, and stimulus to further self-definition of more specific competencies.

Our choice, we think, is fitting to the nature of the field at this time and to the learning and growth processes in mature students.

2. The Polarization of Academic and Professional Objectives.

The Ph.D. Program in Organizational Behavior has always had a dual objective of educating Behavioral Scientists with: 1) a well developed capacity for creative research and teaching, and 2) competence in the strategies and technologies of social intervention and planned change. That is to say, our graduates should be able to move toward either an academic career or an innovative professional practice.

The CBL project was initially intended to focus only on the program's contributions to professional competencies. However, if we were to introduce significant, comprehensive innovations on the professional development front, it would be essential to re-examine the entire program, including an inquiry into our academic purposes and ethos. Thus, the project constituted a major, pervasive intervention into the total program.

The birth of the project generated a great deal of excitement, and more than a little ambivalence. The excitement contained both enthusiasm (about the innovative potential) and anxiety (about the directions this may take the department.) As the scope and intensity of project activities increased, the ambivalence escalated. In the second half of the first year, a strong polarization developed between the academic and professional objectives of the program. As the tension increased, faculty and students alike felt pressed to choose sides and take a stand for one objective or the other.

On the one side, there was growing recognition that professional competence accrued largely from experiential learning, from extensive practice in field settings, and from penetrating confrontations of self and one's performance in professional activities. Moreover, we could not be content with a certification of competence based merely on exposure to courses, on "time-ingrade" (i.e., number of years in the program,), or on paternalistic approval from faculty. Competence itself had to be assessed.

On the other side, there were those who felt the program already gave too much attention to experiential learning, field practice, and the like. The weakness in the program, according to them, lay in our insufficient attention to content -- " We ought to be teaching them something!" -- and in our failure to emphasize classical academic objectives and standards. Why did everyone have to become a consultant or a small group trainer or an activist? Wasn't it OK to be just a scholar? The concern, in part, was for academic respectability, which did not seem to be achievable by turning out practitioners -- "tradesmen, ugh!" Our concerted effort to address the competency issues was seen as pushing the departmental identity toward applied professional work and away from research, theory building, and scholarly publication.

The lines were never very clearly drawn, in terms of who stood on which side, though some could be identified on each. Most of us, recognize that professional competence and academic excellence are not mutually exclusive; in fact, at their best they are synergistic, as can be seen in the dual qualities of quite a number of the outstanding leaders in the field. But the conflict arose nonetheless.

As time went on, we became more and more aware that the ambivalence existed within us -- we each can find within ourselves important motivations and concerns on both sides of the issue. Inspite of sharp conflicts and polarizations in certain tense meetings, we could not persist in taking sides without sacrificing parts of ourselves, i.e., some of our own basic investments. A full politicization of the issue would be destructive to us individually and collectively.

The question is, how are we to understand the dilemma and its roots? And, how are we to manage it and its consequences?

First of all, it is not a new issue. The tension between academic and professional program objectives has a long history here and in many other Ph.D. programs across the country. It has been a significant issue in clinical psychology, social work, engineering, and other fields. The concepts of basic (or pure) vs. applied science are very old indeed, though the latter has generally been granted lower status. (In the extreme, the applied activities are not seen as science at all, and unfitting of upper level university work.)

The problem needs to be understood in terms of its larger institutional and historical contexts. It is worthwhile to consider each of these in some depth.

The polarization reflects the tensions inherent in the overlap of two somewhat different sub-cultures, each with its powerful reference groups. The academic tradition runs deep; its institutional bases are carefully protected and maintained, particularly during times of challenge and the rest to survival. It has a highly developed appreciative system, placing high value on objective inquiry, publication of research findings, knowledge as an end in itself, and academic freedom. Inspite of the occasional jokes and an undercurrent of cynicism or skepticism, the rituals and traditions of scientific, intellectual, and creative pursuits are held precious. Faculty careers hinge largely on them. Nowhere are these matters taken more seriously than in the granting of the Ph.D.

The press for academic respectability, while sometimes scoffed at both within and outside the university community, is strong. The less a program reflects the form as well as the substance of academic and scientific tradition, the more its worthiness is suspect. If we, ourselves, are convinced that the substance is there, appearances are of little consequence. But as we proceeded with the quest for professional competence, a great deal of reassurance was required that, in fact, we were not abandoning nor disparaging academic values.

The professional objectives are also backed by a significant, though less coherent, reference group. While the Ph.D. and scientific knowledge and technology are widely respected in industry, government and elsewhere, there is little admiration for what is seen as ultra-abstract, esoteric thinking, for intellectual one-upsmanship or for meaningless and tedious scientism. The concern, rather, is for pragmatic problem-solving, for realistic approaches to real-world issues, and for an ability to put into practice whatever you talk about. "If it really works, we'll use it, but if you just want to sell fuzzy-mindedness or lofty ideals, to hell with it." Theory for theory sake is bunk in managerial circles.

Students coming from and aspiring to work in "real-world" organizations share many of these attitudes. They want to develop competence which really makes a difference "out there." But they approach with loathing those things which smack of irrelevant make-work, academic hoops to jump through, or meaningless "hurdles" which stand between them and real professional recognition. Knowledge and competence are OK (even if difficult to achieve), academic trappings and ritual are not.

The convergence of historical forces within the Social and Behavioral Sciences also contributes to the polarization at this time. The dominant thrust of the 1950's in these fields was the quest for knowledge. The need was for larger, more encompassing, and more valid theories based on systematic research. An article of faith carried the expectation of that potential future applications of this knowledge in the conduct of human affairs, but this was largely promisory. The major task was to build the academic foundations. Graduate education was aimed toward creating men and women of knowledge.

In the 1960's there was a dramatic emergence of a concern for social action -- for the utilization of knowledge to better the human condition. This was stimulated in large part by the civil rights, peace, and youth movements, whose word to social scientists was, "If you're not part of the solution, you're part of the problem." The academician was confronted (by self as well as others) with the admonition; it's not enough to know and understand. Today's problems demand action today -- what can you do about it?

The issue of relevance, thus, was added to comprehension and validity as criteria for evaluating knowledge and research. Ethos and traditions of academic research and scholarship were severely challenged, particularly in the Behavioral Sciences. The need for men and women of action as well as of knowledge emerged. This program was a pioneer in addressing and meeting this need, and others soon followed.

The plunge into action and striving for rapid social change and self-improvement became a national movement by 1970, noted more by its vigor than its groundedness in knowledge or wisdom. The Social and Behavioral Sciences were as bound to get caught up in this as were political leaders and the mass media. But this was also a time of crisis and torment. A great many social institutions, and this certainly includes universities, were wracked with pressures to change -- now! And, inasmuch as our individual psychic stability is maintained through institutional mechanisms, the press for change was experienced by many as a personal threat. The revolutionary force was met by equally powerful resistance, by a need for stability and recommitment to traditional realities and values.

The social press of the mid-1970's is thus, somewhat reactionary, at least in part. Some of the social and educational experiments of the prior period have been reconverted to earlier patterns. Despite many significant social accomplishments the drive for rapid change has lost some of its steam, partly because some of the changes were not well thought through, or were too discordant with the rest of society. We have entered a period of more thoughtful, rigorous reexamination of what should be changed, and how, and what should be maintained, and how. Among other things, this called for a reinvestment in inquiry.

The cycle described above -- quest for knowledge, plunge into action, reflective withdrawal -- is symptomatic of what has been, in less dramatic form, a continuing dialectic throughout the history of the social sciences, perhaps of all the sciences. Both sides (quest for basic scientific knowledge and active application in the service of society) are always valid and relevant, though one of them may be latent while the other is in ascendence at any particular moment. Similarly, forces toward maintenance and toward change, are present in each of us all the time, though one or the other may be largely suppressed.

The relevance of all this for the present discussion is that the CBL project came into being when the historical pendulum was swinging somewhat away from social action and instigation of change. In fact, the conception of the project was in line with the spirit of the time, inasmuch as it entails a stepping back from active change interventions in order to examine more carefully the nature of competence and its development. Nevertheless, those aspects of the project which focused on competence in planning intervening for change seemed for some people, to run counter to the trend toward recommitment to the pursuit of basic knowledge and reaffirmation of academic values.

The tension between academic and professional objectives easily grows into a conflict, given the historical and institutional contexts. However great the potential for synergism, the dilemma still exists. Its polarization in our case sharpened the issues even more, leading to concerted efforts toward improving both the academic and professional development aspects of the program. Where these clash, compromises are inevitable, though not always very creative. The debate about departmental identity continues, the dialectic presses forward.

3. The Person-Role Dilemma in Professional Development.

Throughout this report, and in our earliest writings, we have stressed the importance of educating the whole person. In our model of professional development, we identified four personal strengths -- spirit of inquiry, integrity, humanistic valuing, and proactive interdependence -- as the core around which Applied Behavioral Science competencies are learned and applied. The Ph.D. and MSOD programs address themselves to the nurturance and continued growth of these strengths in the person, along with general support for adaptation and well-being in their students. Without this emphasis, these programs would merely teach tool, not professional competence.

This very focus on personal growth, desirable as it might be, is a source of crises and stress. The traditional role of "student," which virtually everyone learns through many years of school and college, involves a pattern of student-faculty and student-student relationships which are impersonal, cordially distant, and formalized. The instructor teaches a subject and interaction is idea- and task-oriented. Competition is generated, but highly constrained -- hardly to be talked about, much less acted out, except through superior achievement on academic tasks. Intellectual growth is stimulated, but growth in other dimensions of the person is left unattended, and may even be inhibited. In such a climate, people become security oriented -- they risk exposure of ideas to the extent that their "persons" are invulnerable. Hence, traditionally, faculty and students have colluded to protect one another from personal intrusions. They may become stultified and often lonely, but (with reasonable opportunities for tension release) both parties find ways of maintaining themselves.

The traditional academic culture and a growth oriented culture are very different as formal lecture hall and close-knit family. The culture we work to create in the Ph.D. program, for example, is a great deal more like the latter than the former because of our investment in personal growth. Little wonder that new students and new faculty alike experience some degree of culture shock.

Adaptation to this new culture is made more difficult by two powerful forces. First, since nearly everyone has overlearned the more traditional student role, there is much to be unlearned before new patterns can be achieved. Especially during times of stress, there is a strong tendency to retreat to the more self-protective, though alienating traditional pattern. Second, the dual objectives of academic excellence and professional competence create a mixed message as to what role one should be in -- impersonal or familial. Consequently the adaptation is slow, troublesome, and sometimes painful.

The concurrent focus on intellectual learning, exercising interactional competencies and personal growth is very demanding of time and energy. When the press for academic excellence or demonstration of competence is high, anxiety and needs for security increase; there is little energy left for intensive exploration of self and substantial felt risk in self-disclosure. Conversely, when one gets "turned on" to personal growth, it can be all-consuming for a while, learning little time for work, family study, or anything else.

When the press is high for all three -- academics, competence, and growth -- something is bound to give unless conditions are just right. Self-protection from the (perhaps inherently discordant) overload, in the form of withdrawals, closing up, procrastination, or what have you, is terribly human. But then, so is fear of subtle punishment for not being sufficiently open, engaged, or committed to growth.

At times then, the program creates truly untenable situations for both students and faculty. When stress is high it often has neither the full virtues of a loving family (or therapeutic relationship) nor those of an impersonal bureaucracy, which at least supports members in hiding their pain and withdrawing to a neutral corner to lick their wounds.

This dilemma is serious during times of crisis. At other times it is exciting and fruitful. Tension at manageable levels between personal growth and academic or professional performance is productive and self-actualizing. But when it escalates beyond one's ususal coping abilities, it feels more like hell, and the consequence may be more like immobilization than productivity, or more reflective of regression than growth.

We have learned a great deal about education and about the promotion of personal growth. But at times we don't know enough about either to do them both well.

4. Conflicts in the Faculty Role.

It must be obvious by now that a highly person-centered, competency oriented educational program is highly demanding on time, energy, and emotional commitment for students and faculty alike. Even if we had nothing else to do, a program with only 30 or 40 students would take everything we've got to give and there would still be unmet needs and unfulfilled potentials. It calls for a highly energetic, resourceful, and mature faculty. The concentration on student development conflicts in some subtle ways with needs for faculty development. Whether one wishes it or not, faculty will be viewed as models (good or bad) in most anything they undertake in the program. When faculty do something well, they will probably be admired and respected, but most certainly, if they goof up (especially at some cost to students) they will be widely cussed and discussed. If the emphasis is on competence, the competence of faculty is at a premium. Younger faculty in particular feel a great deal of pressure to do things well or not do them at all. If one is struggling through some issue in one's own growth, and this is at all visible in the department, one's sense of vulnerability is exceptionally high. The same is true if one is just beginning to develop competence and confidence in professional field work.

Our commitment to growth and development in faculty must be as high as it is for students if we are to be healthy learning community. In principle, if faculty are "out front" with their own developmental agendas, this will contribute to the learning and growth of students, especially if they can engage in self-disclosures about issues, problems, and aspirations in their own personal growth. But this is a tall order! Given the extra-ordinary pressures on faculty, openness seems very risky, and not particularly rewarding save as it fits one's own self-interest. The dilemma is that by covering up one's own developmental issues, the faculty members models defensiveness and contributes to a (growth inhibiting) climate of distrust, guardedness, and risk avoidance.

5. Personal Autonomy vs. Program Coordination.

University professors are fiercely jealous of their freedom and autonomy. Independence in the pursuit of knowledge and freedom to teach what one know best is a hallmark. Given their "druthers," they would like not to be coordinated by anyone but themselves. Yet, the development of a comprehensive competency based program is a highly interdependent activity, one which can be done only through careful joint planning and coordination. There are two issues at hand here.

First, in any educational program, it is something of a fiction that various courses and assignments are truly discrete, independent events. At the very least, students will steal time and energy from one course to devote it to the next. Activities in one setting can, at least in part, cancel out the intended learnings in another. Defining program requirements in terms of cumulated credit hours contributes to the fiction; it not only assumes that they are discrete events, but that they are mutually substitutable (3 hours of physics is the same as 3 hours of biology and it doesn't matter which one learns) and can be taken equally well in any order.

These assumptions are grossly unfitting in the development of professional competence, which, while calling for diverse experiences in many contexts, is a holistic process. Program planning calls for looking carefully at how the parts fit together. For optimal impact, the contributions of each faculty members need to be recognized and interlinked synergistically. Hence, programatic innovation is a highly collaborative venture which easily encroaches upon faculty needs for autonomy. More time is required for coordination and interaction as program development becomes a larger enterprise. Given the tension between autonomy and collaboration, optimal size of the planning team and flexible processes of coordination need to be delicately balanced.

The second issue relates to balance between commitment to the program and to other personal or departmental objectives. The management and implementation of the broad range of activities in competency based programs is unusually demanding, leaving little time for individual pursuits, e.g., research, writing, and other scholarly activities. Consequently, faculty are torn between performing well in their contributions to the program and pursuing tasks (e.g., publishing, presenting scholarly papers) which advance their careers or contribute to the field more broadly. The conflicting pulls of teaching vs. research which are found in most graduate faculties are doubled in spades in this department.

This dilemma of autonomy vs. coordination circles back on the academic/professional issue. The academic structure is seen as protecting personal autonomy and effective professional education requires coordination.

In the management of the project we have tried various ways of balancing all five of these dilemmas. Unhappy compromises were made at several critical points; at others, we found creative (though sometimes temporary) solutions. These issues are generic, are not apt to be resolved once and for all, and need to be worked on continually. When they become polarized or politicized, they can be quite destructive. When they are recognized and worked openly, they can not only be managed -- they can lead to inventive new possibilities.